User's Guide

TRENDnet®

AC1750 Dual Band Wireless Access Point

TEW-815DAP

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Product Overview

TEW-815DAP

Package Contents

In addition to your access point, the package includes:

- TEW-815DAP
- Multi-language Quick Installation Guide
- CD-ROM (User's Guide)
- Network cable (1.5 m/5 ft.)
- Power adapter (12 V DC, 2 A)

If any package contents are missing or damaged, please contact the retail store, online retailer, or reseller/distributor from which the product was purchased.

Features

TRENDnet's high performance AC1750 Dual Band Wireless Access Point, model TEW-815DAP, supports Access Point (AP), Client, Repeater, Wireless Distribution System (WDS) Bridge, and WDS + AP modes. The TEW-815DAP generates concurrent 1.3 Gbps Wireless AC and 450 Mbps Wireless N networks. Embedded GREENnet technology reduces power consumption by up to 50%.

Ease of Use

Multi-Mode Support

Supports Access Point (AP), Client, Repeater, Wireless Distribution System (WDS), and WDS + AP modes

One Touch Connection

Securely connect to the access point at the touch of the Wi-Fi Protected Setup (WPS) button

Multi Language

Multi Language Interface: English, Spanish, French, German, and Russian

Logs

Real time logs and statistics help trouble shooting

Security

Encrypted Wireless

Support for wireless encryption up to WPA2

Multiple SSIDs

Create up to four SSIDs per wireless band

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Performance

Next Generation Wireless AC

802.11ac provides uninterrupted HD video streaming in a busy connected environment

Simultaneous Dual Band

High performance 1.3 Gbps Wireless AC + 450 Mbps Wireless N bands

Wireless Coverage

Extended wireless coverage with MIMO antenna technology

Compatibility

Compatible with legacy wireless devices

Gigabit Port

Gigabit LAN port maintains high performance connections to the wired network

Energy Savings

Embedded GREENnet technology reduces power consumption by up to 50%

IPv6

IPv6 network support

Targeted Beamforming

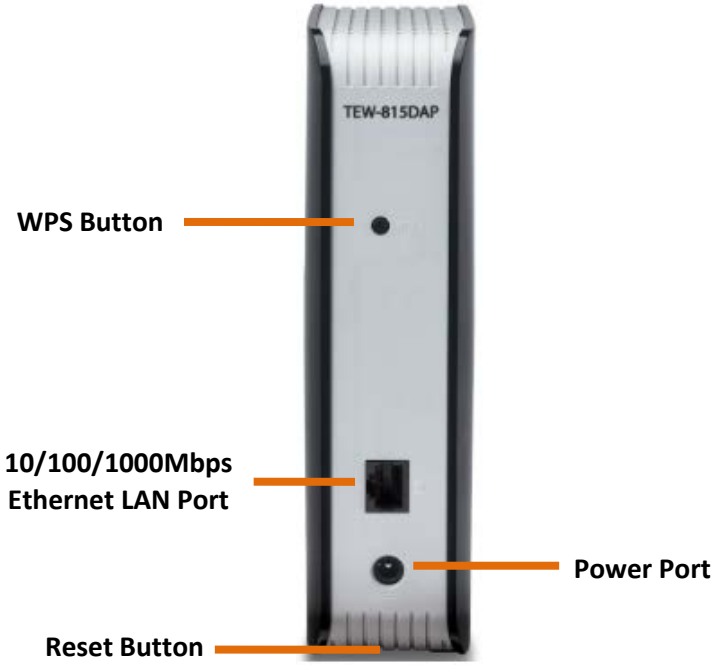
Increased real-time performance by directing stronger wireless signals to your specific location

*For maximum performance of up to 1.3 Gbps use with a 1.3 Gbps 802.11ac wireless client

** Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and coverage will vary depending on interference, network traffic, building materials and other conditions

Product Hardware Features

Rear View



- **Reset Button:** Press and hold this button for 10 seconds to reset the access point.
- **WPS Button (Wi-Fi Protected Setup):** Push and hold this button for 5 seconds to activate WPS. The Power LED will blink when WPS is activated.
- **Ethernet LAN Port:** Connect Ethernet cables (also called network cables) from your access point to your router and wired network devices.
- **Power Port:** Connect the included power adapter from your access point power port and to an available power outlet.

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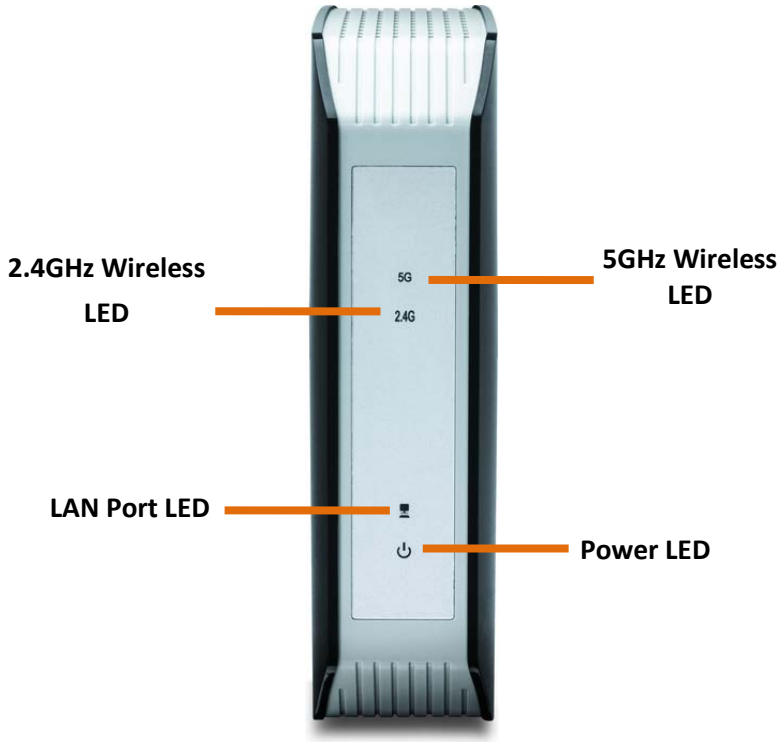
Front View



- **5GHz Wireless (Link/Activity) LED:** The indicator turns on solid green when wireless is enabled on your access point. The indicator will blink during when data is transmitted or received by your wireless client devices connected to your access point.
- **2.4GHz Wireless (Link/Activity) LED:** The indicator turns on solid green when wireless is enabled on your access point. The indicator will blink during when data is transmitted or received by your wireless client devices connected to your access point.
- **Ethernet LAN Port LED:** These LED indicators are solid green when the LAN port is physically connected to your wired network devices (which are turned on) with a network or Ethernet cable. These LED indicators will blink green while data is transmitted or received through your access point's Ethernet LAN port.
- **Power LED:** The indicator is solid green when your access point is powered on. Otherwise if this LED indicator is off, there is no power to your access point. The indicator will also blink when WPS is activated. The LED will stop blinking and remain solid green automatically once WPS process is completed.

Application Diagram

The first access point is installed near your modem/router (typically supplied by your ISP "Internet Service Provider") and physically connected using one of your access point's Ethernet LAN port. The access point is configured to create a WDS (Wireless Distribution System) Bridge or wireless bridge to a second access point installed in your entertainment center extending wireless coverage as well as wired network connectivity to media devices (TVs, game consoles, or media bridges) using the Ethernet LAN port. In addition, 2.4GHz and 5GHz wireless signals from both access points are broadcasted to wireless clients such as laptops (with wireless capability), thereby providing network connectivity and Internet access for all wireless client devices and extending network connectivity.

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Basic Access Point Setup

Expanding a Home Network

What is a network?

A network is a group of computers or devices that can communicate with each other. A home network of more than one computer or device also typically includes Internet access, which requires a router.

A typical home network may include multiple computers, a media player/server, a printer, a modem, and a router. A large home network may also have a switch, additional routers, access points, and many Internet-capable media devices such as TVs, game consoles, and Internet cameras.

- **Modem:** Connects a computer or router to the Internet or ISP (Internet Service Provider).
- **Router:** Connects multiple devices to the Internet.
- **Switch**: Connect several wired network devices to your home network. Your router has a built-in network switch (the LAN port 1-4). If you have more wired network devices than available Ethernet ports on your router, you will need an additional switch to add more wired connections.

How to expand a home network

The access point provides multiple modes to extend your current network.

The access point offers the following modes:

- **Access Point (Default)**
- **Wireless Bridge (also known as WDS mode)**
- **Wireless Range Extender (also known as repeater mode)**
- **Wireless Client Bridge (also known as wireless client adapter mode)**

Where to find more help

In addition to this User's Guide, you can find help below:

- http://www.trendnet.com/support (documents, downloads, and FAQs are available from this Web page)

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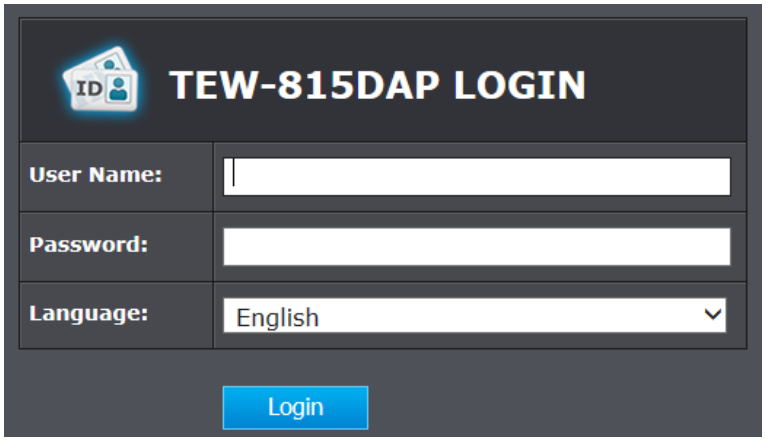
Basic Installation

1. Connect the power adapter to the access point and then to a power outlet. Connect your computer to one of the access point's LAN port. Push the ON/OFF (EU version) switch on the TEW-815DAP to power up the access point.

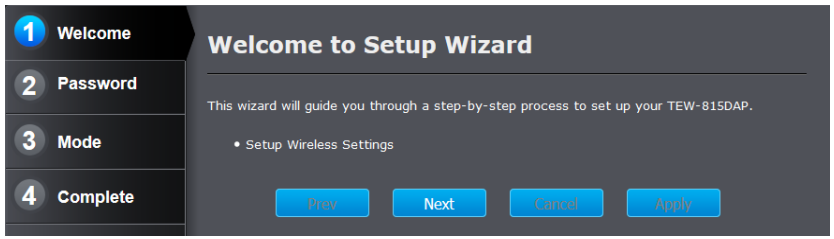
2. Assign a static IP address to your computer's network adapter in the subnet of 192.168.10.x (ex. 192.168.10.25) and a subnet mask of 255.255.255.0. (Please refer to the Appendix on page 49 on how to assign static IP address to your computer)
3. Open your web browser and enter http://tew-815DAP.

   Note: *You can also access the device using the default IP address (192.168.10.100)*

4. Enter the User Name and Password. By default
   User Name: **admin**
   Password: **admin**

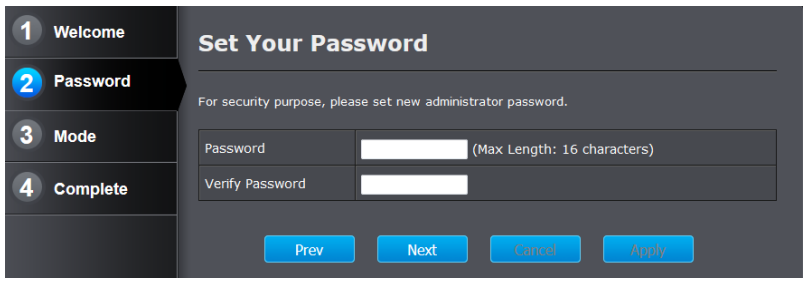


5. The Wizard will start. Click **Next** to begin.



Note: *The Wizard should automatically appear. If the wizard does not appear automatically, then click* ***Wizard.***

6. Enter a new password, verify the new password and click **Next**.



7. Select **Access Point Mode** and then click **Next**.

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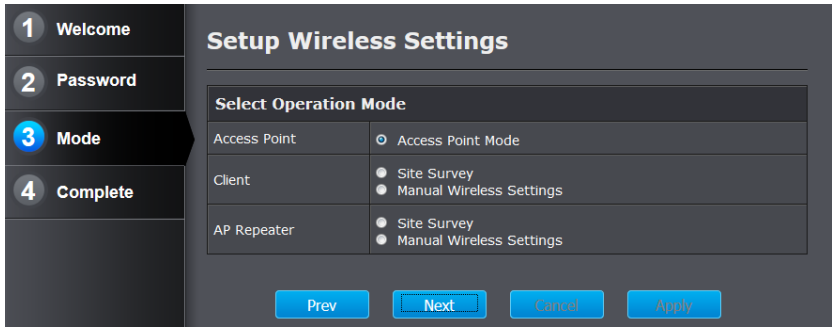

7. For added security, we have pre-encrypted each TEW-815DAP with a unique Wi-Fi Name (SSID) and Wi-Fi Key. You can find these pre-configured settings on the labels at the side and bottom of the TEW-815DAP. You will use this information to connect wirelessly to the access point. To change the Wi-Fi key, please refer to Secure your Wireless Network on page 11. If the access point is reset, the Wi-Fi Key and Wi-Fi Name will also reset to factory defaults click **Next**.

Access Point Mode Status	
IP Address	192.168.10.100
MAC Address	00:11:E0:04:96:AC
Wireless Interface	Wireless 2.4GHz
MAC Address	00:11:E0:04:96:AD
Network Name (SSID1) / Security Mode	TRENDnet815_2.4GHz_3272/WPA2-PSK
WPA passphrase	81514017100
Wireless Interface	Wireless 5GHz
MAC Address	00:11:E0:04:96:B1
Network Name (SSID1) / Security Mode	TRENDnet815_5GHz_3272/WPA2-PSK
WPA passphrase	81514017100

8. Please wait while the settings are being applied. Setup is complete. Connect the access point to your router and connect your network ready devices to the access point's LAN port.

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Access your access point management page

Note: *Your access point management page URL/domain name http://tew-815DAP or default IP address http://192.168.10.100 is accessed through the use of your Internet web browser (e.g. Internet Explorer®, Firefox®, Chrome™, Safari®, Opera™) and will be referenced frequently in this User's Guide.*

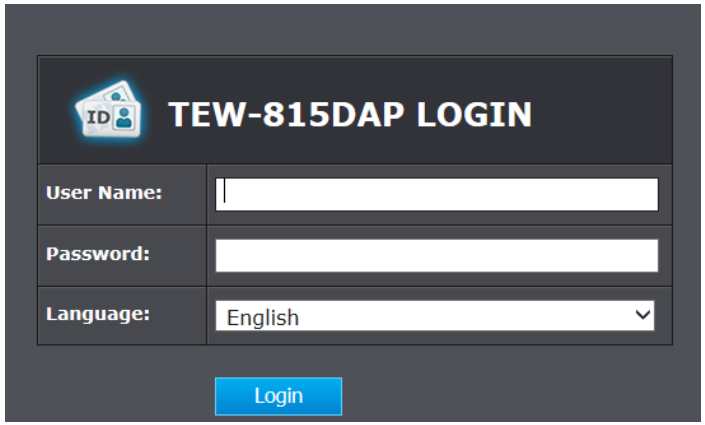
If you have changed the default IP address, you will need to ensure that your computer is configured with IP address settings in the same subnet as the as the access point in order to access the access point management page. (Ex. Access Point IP address changed to 192.168.0.100 / 255.255.255.0, example computer address 192.168.0.25 / 255.255.255.0).

1. Open your web browser and go to URL/domain name*http://tew-815DAP* or IP address http://192.168.10.100. Your access point will prompt you for a user name and password.

2. By default, the user name is *admin* and password is *admin*. You can also find the **Password** on a sticker on the side of the access point and on the label on the bottom of the access point. Enter your **Username** and **Password**, select your preferred language, and then click **Login**.

   Note: *If you have changed the password already such as in the Setup Wizard, you will need to login using the new password.*

   Default User Name: **admin**
   Default Password: **admin**
   Note: *User Name and Password are case sensitive.*



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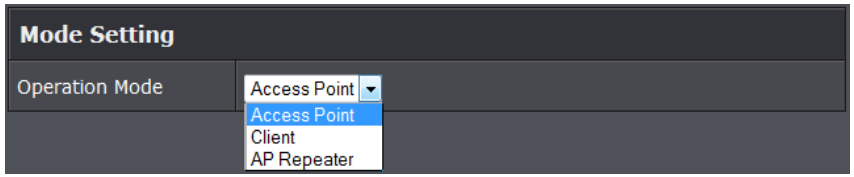
Set the device to access point mode

Main > Device Mode

Note: *By default, the device is set to function in access point mode.*

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Main**, click on **Device Mode.**
3. Click the **Device Operation Mode** drop-down list and select **Access Point**.



4. To save changes, click **Apply**.

Choosing your device mode

Access Point (AP) Mode

By default, your access point functions in Access Point mode, creating a wireless network to allow wireless client devices to connect and access your network resources and access the Internet.

The diagram below shows your access point connected to one of your router LAN ports and functioning in Access Point mode allowing wireless clients (ex. laptops, game consoles, DVRs, Smart TVs, and mobile devices, etc.) to wirelessly connect to your access point to establish network and Internet connectivity.

Note: *The TEW-815DAP has dual band wireless capability allowing the access point to broadcast a wireless network name on two separate bands, 2.4GHz and 5GHz. Wireless clients can connect to your access on either band depending on the wireless band supported by your wireless client. The 2.4GHz band is more commonly used and supported for general applications such as Internet access and web browsing. The 5GHz band is less commonly used and supported which can be more useful for higher or stable bandwidth application requirements such as media streaming as this band may be less likely affected by neighboring wireless networks operating on the 5GHz band.*

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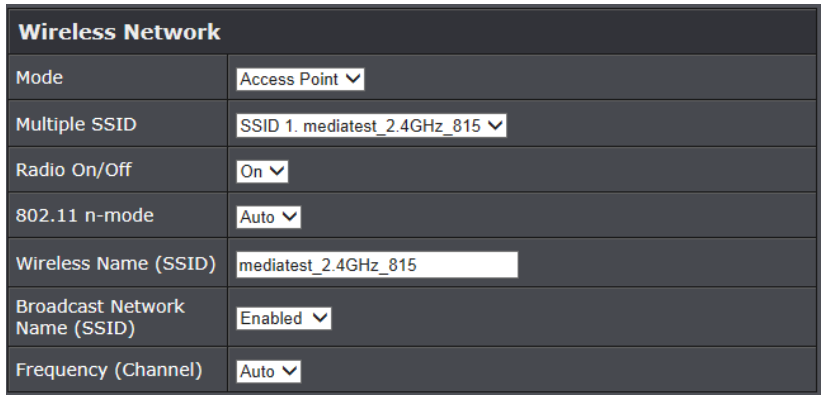
Using access point mode

Wireless > Basic

This section outlines available management options under basic wireless sub tab for both 2.4GHz and 5GHz wireless sections.

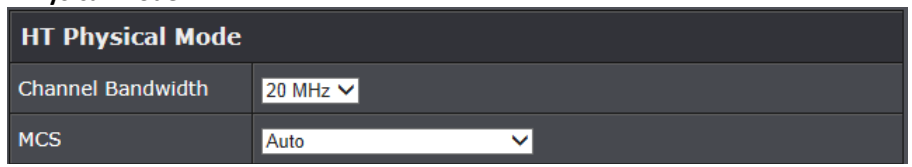
1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless**, click on **Basic** scroll down to **Wireless Network Settings** (2.4GHz or 5GHz)
3. Review the settings, click **Apply** when finished.

Wireless Network



- **Mode:** Select the mode you would like to set the wireless band to operate.
  - o **Access Point:**
  - o **WDS:**
  - o **WDS + AP:**
- **Multiple SSID:** Select the SSID you would like to configure
- **Radio On/Off:** Select On to enable the wireless network/band or Off to disable.
- **802.11 n-mode:** Select the 802.11 mode you would like to the wireless band to **operate on**
  - o **Auto:**
  - o **Off:**
- **Wireless Name:** Enter the wireless name (SSID) for your wireless network. This acronym stands for Service Set Identifier and is the name of your wireless network. It differentiates your wireless network from others around you. By default, the access point's wireless name is unique to the device. If you choose to change the SSID, change it to a name that you can easily remember.
- **Broadcast Network Name (SSID)**
- **Frequency:** Click the drop-down list and select the desired Channel for wireless communication. The goal is to select the Channel that is least used by neighboring wireless networks. Select Auto to have the access point select the operating channel.

HT Physical Mode



- **Channel Bandwidth:** elect the appropriate channel width for your wireless network. This setting only applies to 802.11n. For greater 802.11n performance, select **20/40MHz (Auto)** (Options: 20MHz or 20/40MHz (Auto)). It is recommended to use the default channel bandwidth settings.
  Note: *Please note that this setting may provide more stability than the higher channel bandwidth settings such as* 20/40MHz (Auto) *for connectivity in busy wireless environments where there are several wireless networks in the area.*
  - o **20 MHz:** This mode operates using a single 20MHz channel for wireless devices connecting at 802.11n on both 2.4GHz and 5GHz. This setting may provide more stability than 20/40MHz (Auto) for connectivity in busy wireless environments where there are several neighboring wireless networks in the area.
  - o **40MHz:** When 40MHz is active, this mode is capable of providing higher performance only if the wireless devices support the channel bandwidth settings. Enabling 40MHz typically results in substantial performance increases when connecting an 802.11n client.
- **MCS:** Select the speed you would like your wireless network to operate.

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Wireless Networking and Security

How to choose the type of security for your wireless network

Setting up wireless security is very important. Leaving your wireless network open and unsecure could expose your entire network and personal files to outsiders. TRENDnet recommends reading through this entire section and setting up wireless security on your new access point.

There are a few different wireless security types supported in wireless networking each having its own characteristics which may be more suitable for your wireless network taking into consideration compatibility, performance, as well as the security strength along with using older wireless networking hardware (also called legacy hardware).

It is strongly recommended to enable wireless security to prevent unwanted users from accessing your network and network resources (personal documents, media, etc.).

In general, it is recommended that you choose the security type with the highest strength and performance supported by the wireless computers and devices in your network. Please review the security types to determine which one you should use for your network.

Wireless Encryption Types

- **WEP:** Legacy encryption method supported by older 802.11b/g hardware. This is the oldest and least secure type of wireless encryption. It is generally not recommended to use this encryption standard, however if you have old 802.11 b or 802.11g wireless adapters or computers with old embedded wireless cards(wireless clients), you may have to set your access point to WEP to allow the old adapters to connect to the access point.
  Note: *This encryption standard will limit connection speeds to 54Mbps.*
- **WPA:** This encryption is significantly more robust than the WEP technology. Much of the older 802.11g hardware was been upgraded (with firmware/driver upgrades) to support this encryption standard. Total wireless speeds under this encryption type however are limited to 54Mbps.
  - **WPA-**Auto: This setting provides the access point with the ability to detect wireless devices using either WPA or WPA2 encryption. Your wireless network will automatically change the encryption setting based on the first wireless device connected. For example, if the first wireless client that connects to your wireless network uses WPA encryption your wireless network will use WPA encryption. Only when all wireless clients disconnect to the network and a wireless client with WPA2 encryption connects your wireless network will then change to WPA2 encryption.

  Note: *WPA2 encryption supports 802.11n speeds and WPA encryption will limit your connection speeds to 54Mbps*
- **WPA2:** This is the most secure wireless encryption available today, similar to WPA encryption but more robust. This encryption standard also supports the highest connection speeds. TRENDnet recommends setting your access point to this encryption standard. If you find that one of your wireless network devices does not support WPA2 encryption, then set your access point to either WPA or WPA-Auto encryption.
  Note: *Check the specifications of your wireless network adapters and wireless appliances to verify the highest level of encryption supported.* Below is brief comparison chart of the wireless security types and the recommended configuration depending on which type you choose for your wireless network.

Security Standard	WEP	WPA	WPA2
Compatible Wireless Standards	IEEE 802.11a/b/g (802.11n devices will operate at 802.11g to connect using this standard)	IEEE 802.11a/b/g (802.11n devices will operate at 802.11g to connect using this standard)	IEEE 802.11a/b/g/n
Highest Performance Under This Setting	**Up to 54Mbps**	**Up to 54Mbps**	**Up to 300Mbps**
Encryption Strength	Low	Medium	High
Additional Options	Open System or Shared Key, HEX or ASCII, Different key sizes	TKIP or AES, Preshared Key or RADIUS	TKIP or AES, Preshared Key or RADIUS
Recommended Configuration	Open System ASCII 13 characters	TKIP Preshared Key 8-63 characters	AES Preshared Key 8-63 characters

*Dependent on the maximum 802.11n data rate supported by the device (150Mbps, 300Mbps)

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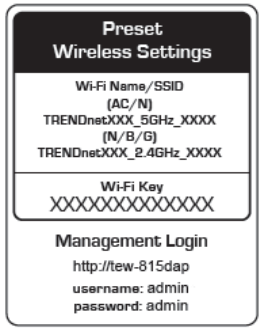
Secure your wireless network

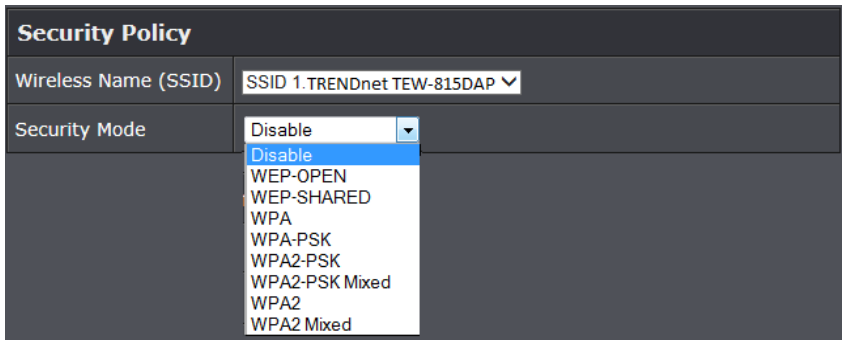
Wireless > Basic

After you have determined which security type to use for your wireless network (see "How to choose the security type for your wireless network" on page 10), you can set up wireless security.

Note: *By default, your access point is configured with a predefined wireless network name (SSID) and security key using WPA2-Personal. The predefined wireless network name and security can be found on the sticker on the side of the access point or on the device label at the bottom of the access point.*



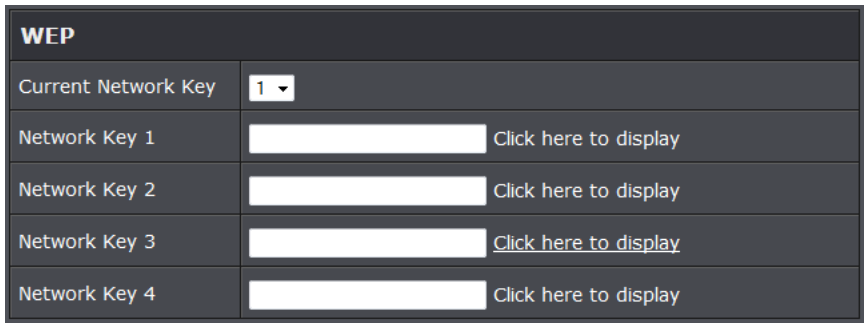
1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless**, and click on **Security**.
3. Under **Wireless Security Mode (2.4GHz or 5GHz)**, click on the **Security Mode** drop-down list to select your wireless security type.



Selecting WEP:

If selecting **WEP-OPEN or WEP-SHARED** (Wired Equivalent Privacy), please review the WEP settings to configure and click **Save Settings** to save the changes.

Note: *WEP encryption is available when 802.11 n-mode is set to Off, 802.11n does not support WEP encryption. In addition, when WEP encryption is selected WPS feature will be disabled.*



- **Network Key:** Select the Key number you would like to use and enter the WEP key. This is the password or key that is used to connect your computer to this access point wirelessly.

WEP Key Format	HEX	ASCII
Character set	0-9 & A-F, a-f only	Alphanumeric (a,b,C,?,*, /,1,2, etc.)
64-bit key length	10 characters	5 characters
128-bit key length	26 characters	13 characters

Selecting WPA-PSK/WPA2-PSK/WPA2-PSK Mixed (WPA2-PSK recommended):

In the **Security Mode** drop-down list, select **WPA-PSK.** Please review the WPA-Personal settings to configure and click **Apply** to save the changes.

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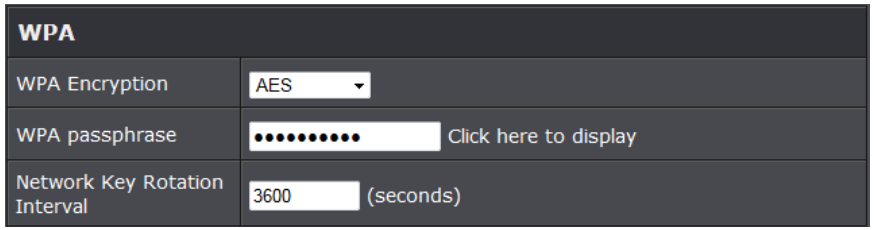
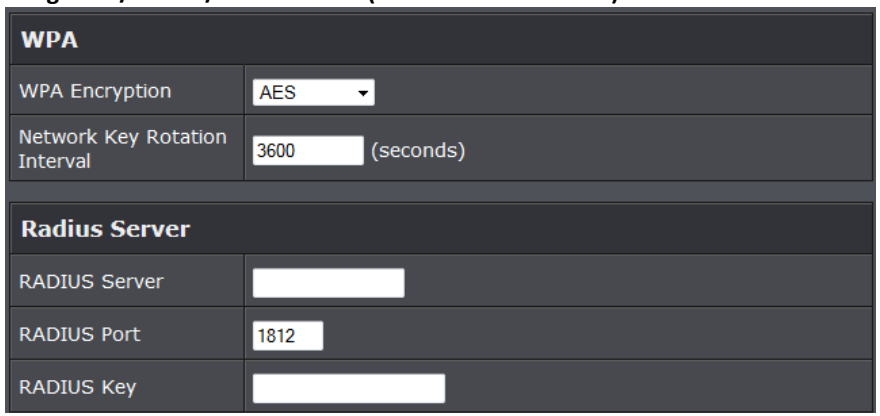


- **WPA Encryption:** Select WPA AES or TKIP encryption you would like to use.
- **WPA passphrase:** Enter the security password. This is the password or key that is used to connect your computer to this access point wirelessly.
- **Network Key Rotation:** Enter the key rotation interval to use for WPA encryption.

Selecting WPA/ WPA2/WPA2 Mixed (WPA2 recommended):



The following section outlines options when selecting **WPA** (EAP or RADIUS)**.** This security type is also known as EAP (Extensible Authentication Protocol) or Remote Authentication Dial-In User Service or RADIUS.

Note: *This security type requires an external RADIUS server, Pre-Shared Key only requires you to create a passphrase.*

- **WPA Encryption:** Select WPA AES or TKIP encryption you would like to use.
- **Network Key Rotation:** Enter the key rotation interval to use for WPA encryption.
- **RADIUS Server Address:** Enter the IP address of the RADIUS server. (e.g. *192.168.10.250)*
- **RADIUS Port:** Enter the port your RADIUS server is configured to use for RADIUS authentication.
  Note: *It is recommended to use port 1812 which is typical default RADIUS port.*
- **RADIUS Key:** Enter the shared secret used to authorize your access point with your RADIUS server.

Connect wireless devices to your access point

A variety of wireless network devices can connect to your wireless network such as:

Gaming Consoles

- Internet enabled TVs
- Network media players
- Smart Phones
- Wireless Laptop computers
- Wireless IP cameras

Each device may have its own software utility for searching and connecting to available wireless networks, therefore, you must refer to the User's Manual/Guide of your wireless client device to determine how to search and connect to this access point's wireless network.

See the "Appendix" on page 49 for general information on connecting to a wireless network.

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Connect wireless devices using WPS

WPS (Wi-Fi Protected Setup) is a feature that makes it easy to connect devices to your wireless network. If your wireless devices support WPS, you can use this feature to easily add wireless devices to your network.

Note: *You will not be able to use WPS if you set the SSID Broadcast setting to Disabled or if you are using WEP security. Please note that WPS functionality will only be available when the Device Mode is set to Access Point mode under Main > Device Mode.*

There are two methods the WPS feature can easily connect your wireless devices to your network.

- Push Button Configuration (PBC) method
  - o (RECOMMENDED) Hardware Push Button method–with an external button located physically on your access point and on your client device
  - o WPS Software/Virtual Push Button - located in access point management page
- PIN (Personal Identification Number) Method - located in access point management page

  Note: *Refer to your wireless device documentation for details on the operation of WPS.*

Recommended Hardware Push Button (PBC) Method

Note: It is recommended that a wireless key (passphrase or password) is created before connecting clients using the PBC method. By default your access point is preconfigured with a wireless encryption key. If no wireless key is defined when connecting via PBC, the access point will automatically create an encryption key that is 64 characters long. This 64 character key will then have to be used if one has to connect computers to the access point using the traditional connection method.

To add a wireless device to your network, simply push the WPS button on the wireless device you are connecting (consult client device User's Guide for length of time), then push and hold the WPS button located on your access point for 3 seconds and release it. The WPS LED will blink to indicate WPS has been activated on your access point. (See "Product Hardware Features" on page 2)

For connecting additional WPS supported devices, repeat this process for each additional device.

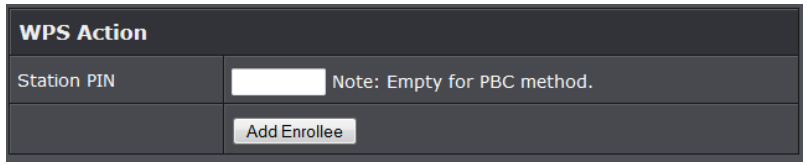
PBC (Software/Virtual Push Button)

Wireless > Wi-Fi Protected Setup

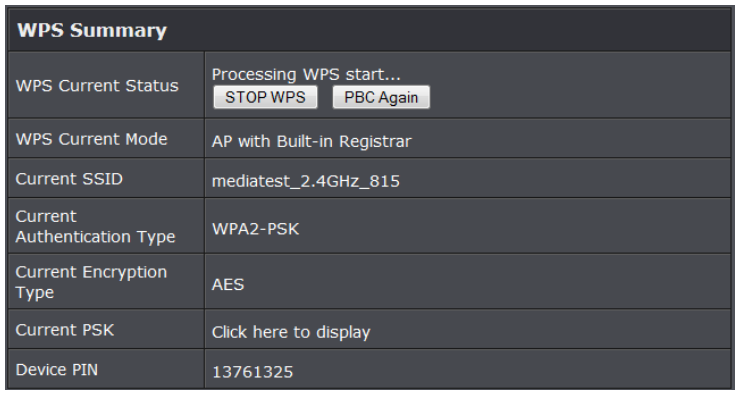
In addition to the hardware push button located physically on your access point, the access point management page also has push button which is a software or virtual push button you can click to activate WPS on your access point.

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless**, and click on **WPS**.
3. To add a wireless device to your network, click the **Add Enrollee** button in the WPS Action section.

   Note: *Leave Station PIN field empty to use PBC method.*



4. Then push the WPS button on the wireless device (consult wireless device's User's Guide for length of time) you are connecting.
5. Wait for your access point to finsh the WPS process.



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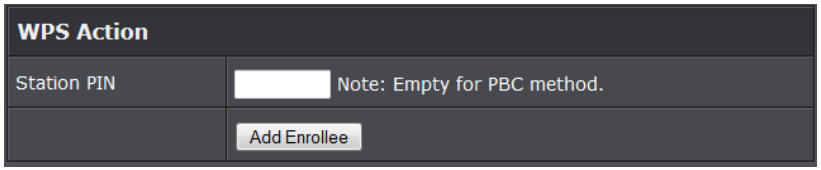
PIN (Personal Identification Number)

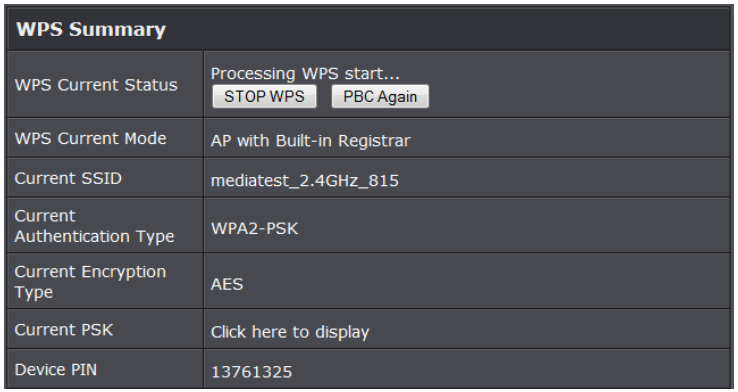
Wireless > Wi-Fi Protected Setup

If your wireless device has WPS PIN (typically an 8-digit code printed on the wireless device product label or located in the wireless device wireless software utility), you can use this method.

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless**, and click on **Wi-Fi Protected Setup**.
3. To add a wireless device to your network, enter the 8-digit numeric PIN number of the wireless client device and click **Add Enrollee**.



4. Wait for your access point to finsh the WPS process.



5. If successful, you will receive the message below. Click on **Wireless Status** to view the information about the current wireless client devices connected to your access point.

Steps to improve wireless connectivity

There are a number of factors that can impact the range of wireless devices. Follow these tips to help improve your wireless connectivity:

1. Keep the number of obstructions to a minimum. Each obstruction can reduce the range of a wireless device. Position the wireless devices in a manner that will minimize the amount of obstructions between them.
   a. For the widest coverage area, install your access point near the center of your home, and near the ceiling, if possible.
   b. Avoid placing the access point on or near metal objects (such as file cabinets and metal furniture), reflective surfaces (such as glass or mirrors), and masonry walls.
   c. Any obstruction can weaken the wireless signal (even non-metallic objects), so the fewer obstructions between the access point and the wireless device, the better.
   d. Place the access point in a location away from other electronics, motors, and fluorescent lighting.
   e. Many environmental variables can affect the access point's performance, so if your wireless signal is weak, place the access point in several locations and test the signal strength to determine the ideal position.
2. Building materials can have a large impact on your wireless signal. In an indoor environment, try to position the wireless devices so that the signal passes through less dense material such as dry wall. Dense materials like metal, solid wood, glass or even furniture may block or degrade the signal.
3. Antenna orientation can also have a large impact on your wireless signal. Use the wireless adapter's site survey tool to determine the best antenna orientation for your wireless devices.
4. Interference from devices that produce RF (radio frequency) noise can also impact your signal. Position your wireless devices away from anything that generates RF noise, such as microwaves, radios and baby monitors.

If possible, upgrade wireless network interfaces (such as wireless cards in computers) from older wireless standards to 802.11n or 802.11ac. If a wirelessly networked device uses an older standard, the performance of the entire wireless network may be slower. If you are still experiencing low or no signal consider repositioning the wireless devices, installing additional access points or wireless extenders.

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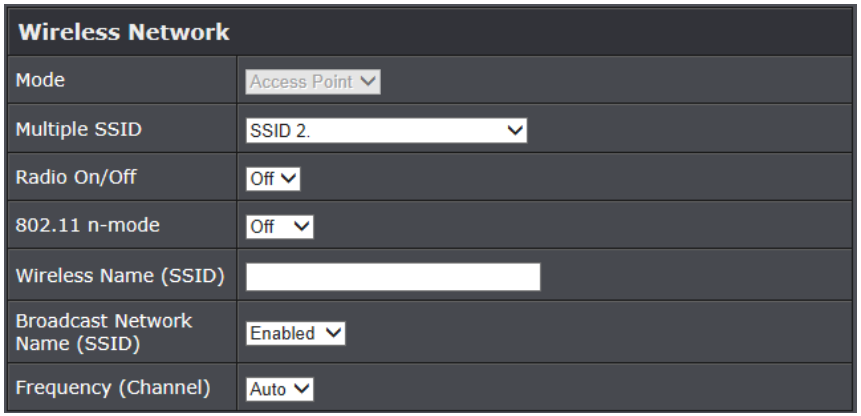
Multiple SSID

Wireless > Basic

The multiple SSID feature allows you to broadcast up to 3 additional SSIDs (or wireless network names) per band (2.4GHz and 5GHz). When wireless devices are searching for available wireless networks to connect to, the SSIDs (or wireless network names) will appear as separate and different wireless networks. Each SSID can be configured each with a different SSID (or wireless network name), security type and additional settings for wireless devices to connect. You can use the multiple SSID feature to setup guest wireless accounts with a different security type to keep your primary wireless network security information private.

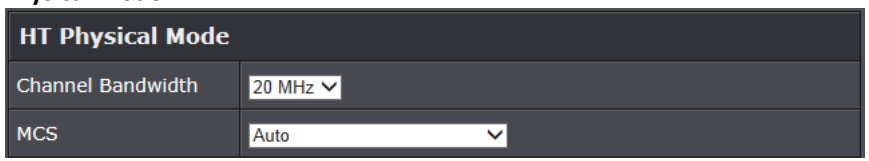
1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless**, and click on **Basic**.
3. Click the **Multi-SSID Index** drop-down list and select the SSID to configure (SSID 1 is the primary SSID).

4. Review the settings, click **Apply** when finished.



- **Radio On/Off:** Select On to enable the wireless network/band or Off to disable.
- **802.11 n-mode:** Select the 802.11 mode you would like to the wireless band to **operate on**
  - o **Auto:**
  - o **Off:**
- **Wireless Name:** Enter the wireless name (SSID) for your wireless network. This acronym stands for Service Set Identifier and is the name of your wireless network. It differentiates your wireless network from others around you. By default, the access point's wireless name is unique to the device. If you choose to change the SSID, change it to a name that you can easily remember.
- **Broadcast Network Name (SSID)**
- **Frequency:** Click the drop-down list and select the desired Channel for wireless communication. The goal is to select the Channel that is least used by neighboring wireless networks. Select Auto to have the access point select the operating channel.

HT Physical Mode



- **Channel Bandwidth:** elect the appropriate channel width for your wireless network. This setting only applies to 802.11n. For greater 802.11n performance, select

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20/40MHz (Auto) (Options: 20MHz or 20/40MHz (Auto)). It is recommended to use the default channel bandwidth settings.

Note: *Please note that this setting may provide more stability than the higher channel bandwidth settings such as* 20/40MHz (Auto) *for connectivity in busy wireless environments where there are several wireless networks in the area.*

- **20 MHz:** This mode operates using a single 20MHz channel for wireless devices connecting at 802.11n on both 2.4GHz and 5GHz. This setting may provide more stability than 20/40MHz (Auto) for connectivity in busy wireless environments where there are several neighboring wireless networks in the area.
- **40MHz:** When 40MHz is active, this mode is capable of providing higher performance only if the wireless devices support the channel bandwidth settings. Enabling 40MHz typically results in substantial performance increases when connecting an 802.11n client.

- **MCS: dfshgjhkjjg**
  -
  - **Frequency:** Click the drop-down **Schedule –** The schedule function allows you to

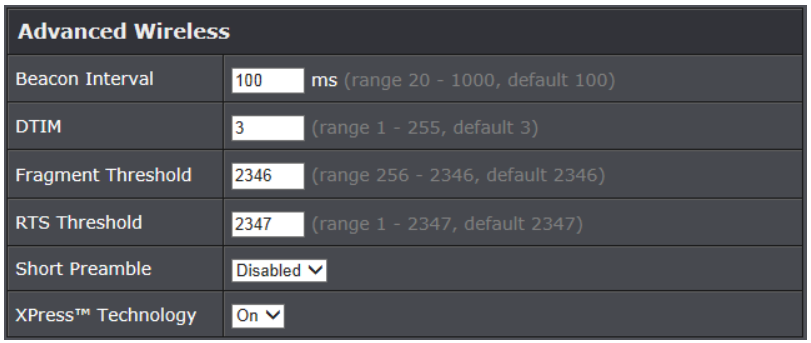
Repeat these steps 2-7 to configure the additional SSIDs.

Note: *To verify that the multiple SSIDs are active, using a wireless device, scan for available wireless networks and check if the wireless device is able to discover the SSIDs. To check connectivity, using a wireless device, connect to these SSIDs using the wireless security types you have configured.*

Advanced wireless settings

Wireless > Advanced

These settings are advanced options that can be configured to change advanced wireless broadcast specifications. It is recommended that these settings remain set to their default values unless you are knowledgeable about the effects of changing these values. Changing these settings incorrectly can degrade performance.



- **Beacon Interval:** A beacon is a management frame used in wireless networks that transmitted periodically to announce the presence and provide information about the access point's wireless network. The interval is the amount time between each beacon transmission.

  Default Value: 100 milliseconds (range: 20-1000)

- **DTIM:** A DTIM is a countdown informing clients of the next window for listening to broadcast and multicast messages. When the wireless Access Point has buffered broadcast or multicast messages for associated clients, it sends the next DTIM with a DTIM Interval value. Wireless clients detect the beacons and awaken to receive the broadcast and multicast messages. The default value is 1. Valid settings are between 1 and 255.
- **Fragmentation Threshold:** Wireless frames can be divided into smaller units (fragments) to improve performance in the presence of RF interference and at the limits of RF coverage. Fragmentation will occur when frame size in bytes is greater than the Fragmentation Threshold. This setting should remain at its default value of 2346 bytes. Setting the Fragmentation value too low may result in poor performance.
- **RTS Threshold:** When an excessive number of wireless packet collisions are occurring, wireless performance can be improved by using the RTS/CTS (Request to Send/Clear to Send) handshake protocol. The wireless transmitter will begin to send

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RTS frames (and wait for CTS) when data frame size in bytes is greater than the RTS Threshold. This setting should remain at its default value of 2346 bytes.

- **Short Preamble:** Using a short guard interval can increase throughput. However, it can also increase error rate in some installations, due to increased sensitivity to radio-frequency reflections.

- **Xpress™ Technology:** A frame bursting technology used to improve wireless performance. The feature will only work with other Xpress™ supported devices. It is recommended to leave this feature On.

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Wireless Bridge (WDS)

Wireless bridging using WDS (Wireless Distribution System) allows the device to create a wireless bridge with other WDS supported wireless routers and access points configured in WDS mode to bridge groups of network devices together wirelessly. Network enabled devices can be plugged into the Ethernet LAN port. WDS is subset option of Access Point mode.

There are 2 types of WDS modes,

- **WDS (pure WDS):** Strictly for establishing wireless bridging only and will not function in access point simultaneously, allowing wireless client devices such as computers, game consoles, mobile phones, etc. to connect in order to access network resources from multiple groups of network devices as well as the Internet. The diagram below illustrates examples of pure WDS.
- **WDS+AP:**- Allows the device to establish wireless bridging and function as access point simultaneously, allowing wireless client devices such as computers, game consoles, mobile phones, etc. to connect to the access point in order to access network resources from multiple groups of network devices as well as the Internet. Please refer to the section Wireless Bridge (WDS) with Access Point (AP) Mode on page 19 for details on this mode.

Note: *You can create up to four WDS bridge connections on each wireless band (2.4GHz and 5GHz). WDS (Wireless Distribution System) is not currently standardized and may not connect to different model wireless routers or access points, therefore, when using WDS, it is recommended to use the same model and version for wireless bridging.*

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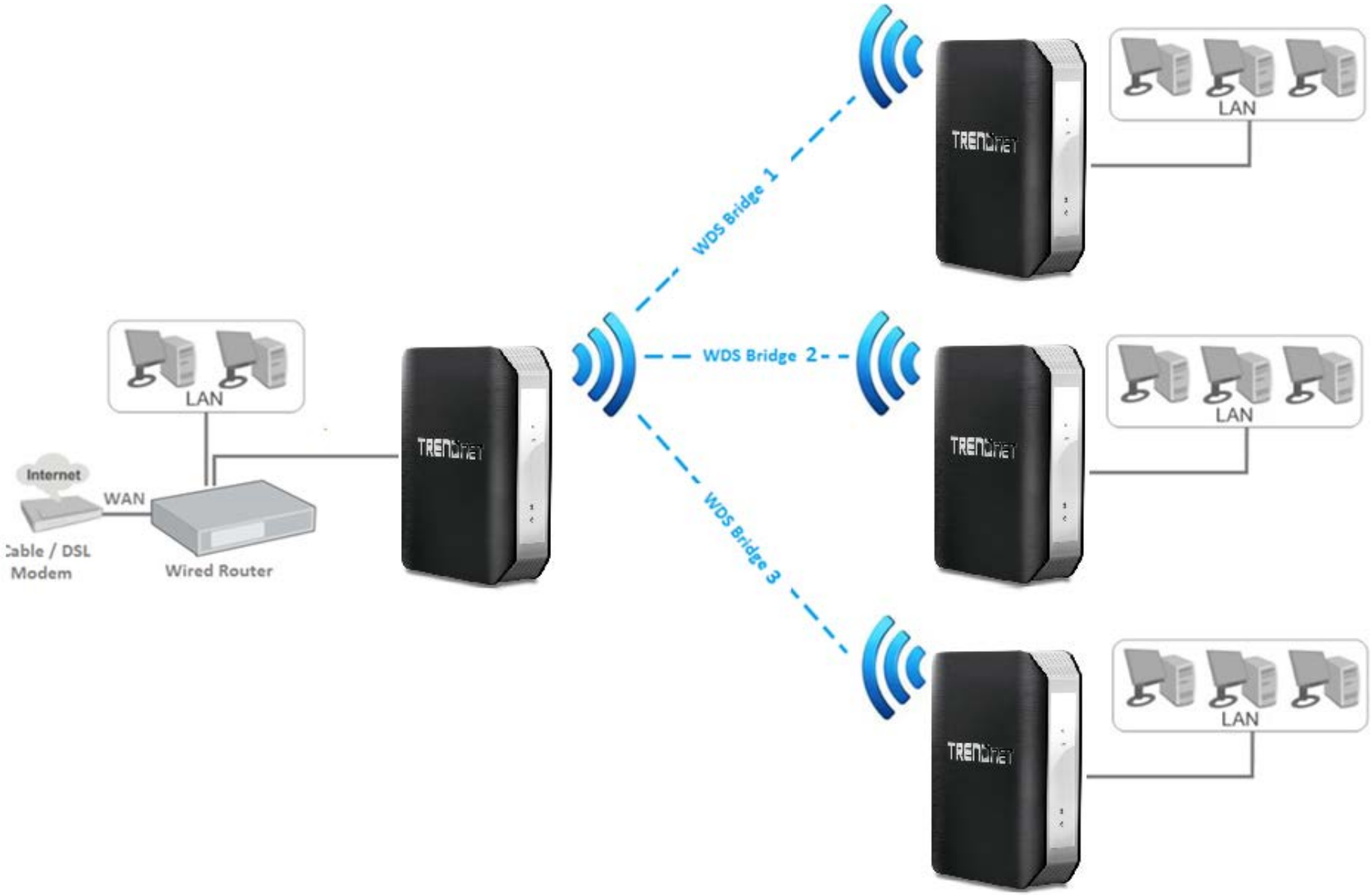
The diagram below illustrates an example of multiple WDS wireless bridge links.



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Access Point Mode with Wireless Bridge (WDS)

Wireless bridging using WDS (Wireless Distribution System) allows the device to create a wireless bridge with other WDS supported wireless routers and access points configured in WDS mode to bridge groups of network devices together wirelessly. Network enabled devices can be plugged into the Ethernet LAN port. WDS is subset option of Access Point mode.

There are 2 types of WDS modes,

- **WDS+AP:**- Allows the device to establish wireless bridging and function as access point simultaneously, allowing wireless client devices such as computers, game consoles, mobile phones, etc. to connect to the access point in order to access network resources from multiple groups of network devices as well as the Internet. The diagrams below illustrate examples of WDS with Access Point.
- **WDS (pure WDS):** Strictly for establishing wireless bridging only and will not function in access point simultaneously, allowing wireless client devices such as computers, game consoles, mobile phones, etc. to connect in order to access network resources from multiple groups of network devices as well as the Internet. Please refer to the section Wireless Bridge (WDS) Mode page 18 for details on this mode.

Note: *You can create up to four WDS bridge connections on each wireless band (2.4GHz and 5GHz). WDS (Wireless Distribution System) is not currently standardized and may not connect to different model wireless routers or access points, therefore, when using WDS, it is recommended to use the same model and version for wireless bridging.*

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The diagram below illustrates an example of multiple WDS wireless bridge links with access point functionality.

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Planning for Wireless Bridging (WDS)

Note: *By default, the device is set to function in access point mode. WDS is a subset option of Access Point Mode. You must set your access point device mode to operate in Access Point first in order to configure WDS. Please ensure the Device Mode is set to Access Point under Main > Device Mode.*

Before configuring WDS, please ensure the following items first:

1. Choose which band to use for bridging (2.4GHz or 5GHz). If all of your WDS supported devices do not the 5GHz band, you may need to choose the 2.4GHz.

2. Make sure different IP addresses are assigned to each WDS supported wireless device used for bridging. (ex. 192.168.10.100,192.168.10.99,192.168.10.98, etc.) to avoid IP address conflicts. See the section Change your access point IP address page 39 for changing the access point IP address.

3. Please ensure that only one DHCP server is assigning IP addresses on your network to avoid IP address conflicts. Typically, most routers used in a home environment include a built-in DHCP server (typically enabled by default) to assign IP addresses to local client devices automatically. Please make sure that only one device on your network has DHCP server enabled and disabled on all others to avoid IP address conflicts.

4. WDS bridging requires all WDS supported devices to use the same wireless network name (SSID), wireless channel, and wireless security settings on all WDS supported wireless devices. Refer to page 9 "Using access point mode" to configure wireless network name (SSID) and wireless channel settings. Refer to page 10 "Wireless Networking and Security" to configure wireless security settings.

5. You will require the wireless MAC address of each WDS supported device. On any network, each network device has a unique 6-digit MAC (Media Access Control) address. *For each WDS supported device, all of the remote wireless MAC addresses of the other WDS supported device you are bridging. (Ex. In diagram on the next page, AP1 needs to enter the remote MAC addresses (red text) of AP2, AP3, and AP4. AP2 needs to enter the remote MAC address of AP1 only, AP3 and AP4 also need to enter the remote MAC address of AP1 only). You can find the wireless MAC address of the access point in the management page under Status > Device Information.*

Note: *Please note that 2.4GHz and 5GHz bands will have two different MAC addresses.*

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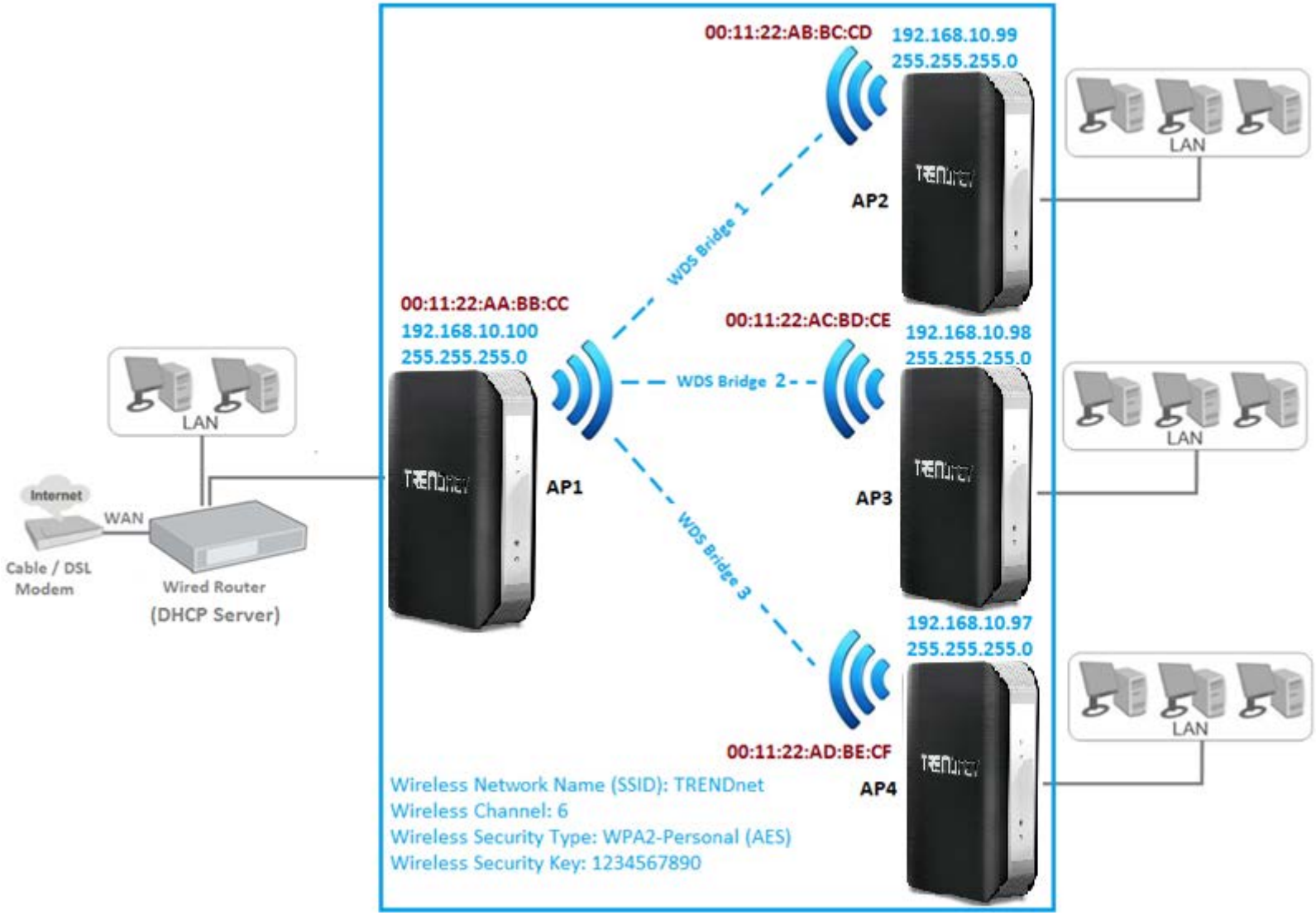
The diagram below illustrates an example of the parameters configured when planning for WDS bridging. Each WDS supported access point is configured with a different IP address **(blue)** to prevent IP address conflict. The "wired router" is the only single DHCP server **(gray)** providing automatic IP address assignment for all client devices in the network. The WDS parameters required to match on all WDS supported access points in order to establish WDS wireless bridging is configured **(blue)**. The wireless MAC of all devices is noted **(red)**.



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Creating a Wireless Bridge (WDS)

Wireless > Basic

Note: *Since wireless bridge (WDS) is a subset of Access Point mode, please make sure that Access Point mode is selected under Main > Device Mode for all access points. See page 13 "Set your device to access point mode." This procedure can apply for both WDS and WDS+AP modes.*

To configure a wireless bridge (WDS) between two TEW-815DAP access points:

- Make note of the wireless MAC address of both access points. See page XX for checking the status page.

  Note: *Please note that 2.4GHz and 5GHz bands will have two different MAC addresses. If using the 2.4GHz band wireless MAC address, please use the 2.4GHz wireless MAC address for all other WDS supported devices to bridge and if using the 5GHz band wireless MAC address, use the 5GHz wireless MAC address for all other WDS supported devices to bridge.*

  Example:

  AP1 (Access Point 1) 2.4GHz Wireless MAC Address: 00:11:22:AA:BB:C1

  AP1 (Access Point 1) 5GHz Wireless MAC Address: 00:11:22:AA:BB:C2

  AP2 (Access Point 2) 2.4GHz Wireless MAC Address*: 00:11:22:AA:BB:****C3***

  AP2 (Access Point 2) 5GHz Wireless MAC Address*: 00:11:22:AA:BB:****C4***

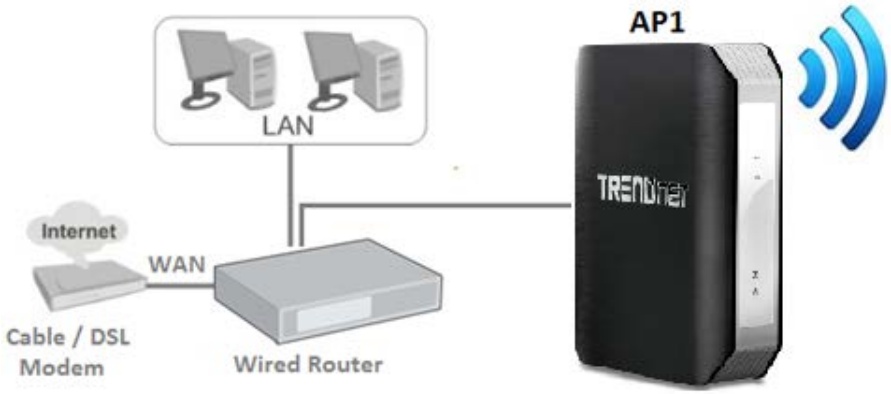
- Make sure the IP address on each WDS supported access is point is different and on the same IP network/subnet. See page XX for changing access point IP address.

  Example:

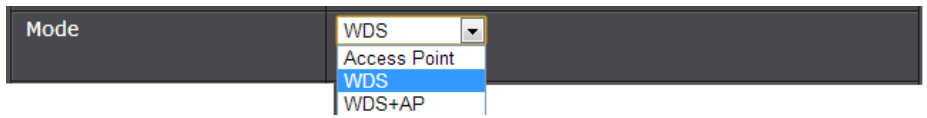
  AP1 (Access Point 1) IP Address Settings*: 192.168.10.****100*** */ 255.255.255.0*

  AP2 (Access Point 2) IP Address Settings*: 192.168.10.****99*** */ 255.255.255.0*

AP1 Configuration



1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless**, click on **Basic** and scroll down to **Wireless Network Settings -** (2.4GHz or 5GHz). ***Note:*** *For this example, 2.4GHz band will be used.*
3. Click the **Mode** drop-down list and select one of following WDS options.
   - **WDS:** Select this option to establish wireless bridging only without broadcasting your wireless network name for client devices to connect. Please refer to the section Wireless Bridge (WDS) Mode page 18 for details on this mode.
   - **WDS+AP (Recommended):** Select this option to establish wireless bridging and broadcast your wireless network name for client devices to connect simultaneously. See page 23 for details. Please refer to the section Wireless Bridge (WDS) with Access Point (AP) Mode on page 20 for details on this mode.



4. Next to **Wireless Network Name**, enter the wireless network name (SSID). (ex. TRENDnet815_2.4GHz)

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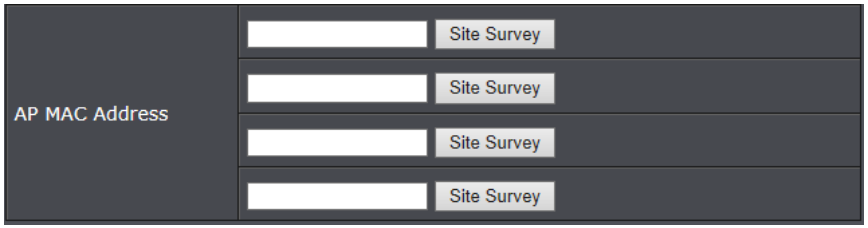
5. Click the **Wireless Channel** drop-down list and select a specific wireless channel.(ex. 2.462GHz - CH 11)

6. Under the **WDS** section, next to **Remote AP MAC Address1**, enter the wireless MAC address of the remote WDS supported access point or router.



Note: *Based on the example, enter the remote 2.4GHz wireless MAC address of AP2.(00:11:22:AA:BB:**C3**)*

Note: *You can also use the site survey option to scan for your remote WDS supported device broadcasting (AP or WDS+AP), then select and connect to copy the wireless MAC addresses of your other WDS supported devices. This simplifies the process of having to write down the wireless MAC addresses of all devices and manually enter.*

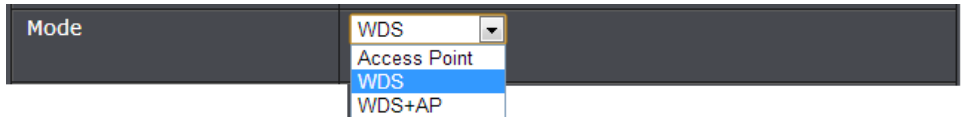
7. Configure the wireless security settings and wireless key.

Note: *Please refer to page 10 "Wireless Networking and Security" for details on configuring wireless security settings.*

8. Click **Apply**.

AP2 Configuration

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless**, click on **Basic** and scroll down to **Wireless Network Settings -** (2.4GHz or 5GHz). ***Note:*** *For this example, 2.4GHz band will be used which also matches the band used for AP1.*
3. Click the **Mode** drop-down list and select one of following WDS options. ***Note:*** *WDS or WDS+AP modes can work with each other between WDS support devices.*
   - **WDS:** Select this option to establish wireless bridging only without broadcasting your wireless network name for client devices to connect. Please refer to the section Wireless Bridge (WDS) Mode page 18 for details on this mode.
   - **WDS+AP** (Recommended): Select this option to establish wireless bridging and broadcast your wireless network name for client devices to connect simultaneously. Please refer to the section Wireless Bridge (WDS) with Access Point (AP) Mode on page 20 for details on this mode.



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4. Next to **Wireless Network Name**, enter the wireless network name (SSID).

Note: *For this example, the wireless network name (SSID) is required to match the wireless network name (SSID) configured on AP1.*

(ex. TRENDnet815_2.4GHz)

5. Click the **Wireless Channel** drop-down list and select a specific wireless channel.

Note: *For this example, the wireless channel is required to match the wireless channel configured on AP1.*

(ex. 2.462GHz - CH 11)

6. Under the **WDS** section, next to **AP MAC Address**, enter the wireless MAC address of the remote WDS supported access point or router.

Note: *Based on the example, enter the remote 2.4GHz wireless MAC address of AP1.*

*(00:11:22:AA:BB:**C1**)*

Note: *You can also use the site survey option to scan for your remote WDS supported device broadcasting (AP or WDS+AP), then select and connect to copy the wireless MAC addresses of your other WDS supported devices. This simplifies the process of having to write down the wireless MAC addresses of all devices and manually enter.*

7. Configure the wireless security settings and wireless key.

Note: *Please refer to page 10 "Wireless Networking and Security" for details on configuring wireless security settings.*

8. Click **Apply**.

Bridging additional WDS supported devices

For a point-to-multipoint (hub and spoke) WDS configuration, the AP2 (spoke) configuration procedure in the previous section "Creating a Wireless Bridge" page 24 can be used when creating additional WDS bridges to AP1 (hub).

For multiple point-to-point wireless WDS bridge links, you can follow the entire configuration procedure in the previous section **"**Creating a Wireless Bridge" on page 24.

The TEW-815DAP can support up to 4 wireless WDS bridges per band (2.4GHz and 5GHz) for a total of 8 wireless WDS bridge connections.

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Additional WDS Options

The TEW-815DAP access point provides 2 methods to simplify the entering the remote wireless MAC addresses when configuring WDS mode.

Lazy WDS

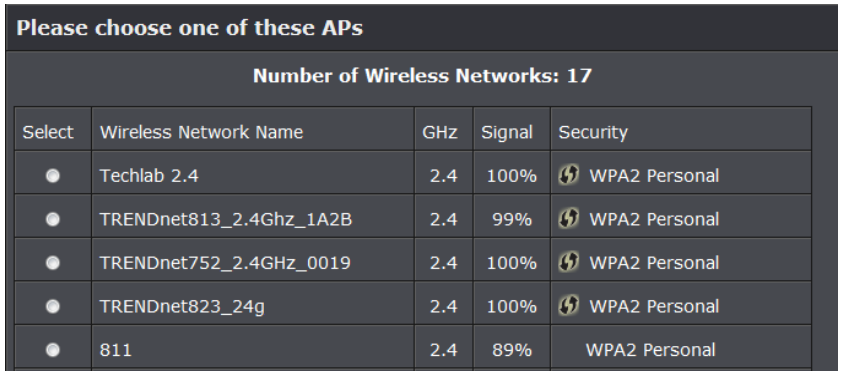
Wireless > Basic > WDS

This option simplifies the configuration of MAC address in WDS by only requiring one side of a WDS bridge to add remote wireless MAC addresses. For example, if the wireless MAC address of AP2 has been added to AP1, the wireless MAC address of AP1 does not need to be added to AP2. On AP2, you would need to simply enable (check) Lazy WDS to establish the bridge connection. This option is only available when using Wireless Bridge with Access Point.

WDS Site Survey

Wireless > Basic > Wireless Network Settings - (2.4GHz or 5GHz) > WDS

This option allows you to scan for your remote WDS supported devices broadcasting (WDS+AP mode), then select and connect to copy the wireless MAC addresses of your other WDS supported device. This simplifies the process of having to write down the wireless MAC addresses of all other WDS supported devices. This option is most useful when using Wireless Bridge with Access Point.



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Wireless Range Extender (AP Repeater)

Wireless range extender or repeater mode allows the device to extend the range of an existing wireless network. The existing wireless signal can be broadcasted from your wireless router or other access point. In addition, other network enabled devices can connect to your network using the Ethernet LAN port. The functionality of this mode is similar to WDS with Access Point however, wireless range extender mode does not require the other wireless device to support repeater or WDS and can only function using one band at a time, 2.4GHz or 5GHz and other modes cannot be used simultaneously. The TEW-815DAP offers two types of repeater modes, Concurrent Dual Band and High Performance Single Band. In Concurrent Dual Band mode the TEW-815DAP can repeat both wireless 2.4GHz and 5GHz wireless bands. This mode is ideal to use with an existing wireless dual band network allowing the TEW-815DAP to repeat both wireless 2.4GHz and 5GHz networks. High Performance Single Band connects to your existing wireless network with either 2.4GHz or 5GHz wireless and broadcasts on the other wireless band. This mode allows the TEW-815DAP to utilize each wireless band isolating each wireless band to specifically connect to your network and transmit to wireless clients. This mode can also be used to introduce a new wireless network to your existing network. For instance, if you only have a wireless 2.4GHz network. You can configure the TEW-815DAP in High Performance Single Band repeater mode, connect the TEW-815DAP to your existing wireless 2.4GHz network and the TEW-815DAP will transmit in the 5GHz band, allowing you to utilize any 5GHz clients. The diagram illustrates an example of the device repeating the signal of an existing access point. Wireless client devices can connect to which ever signal is stronger.

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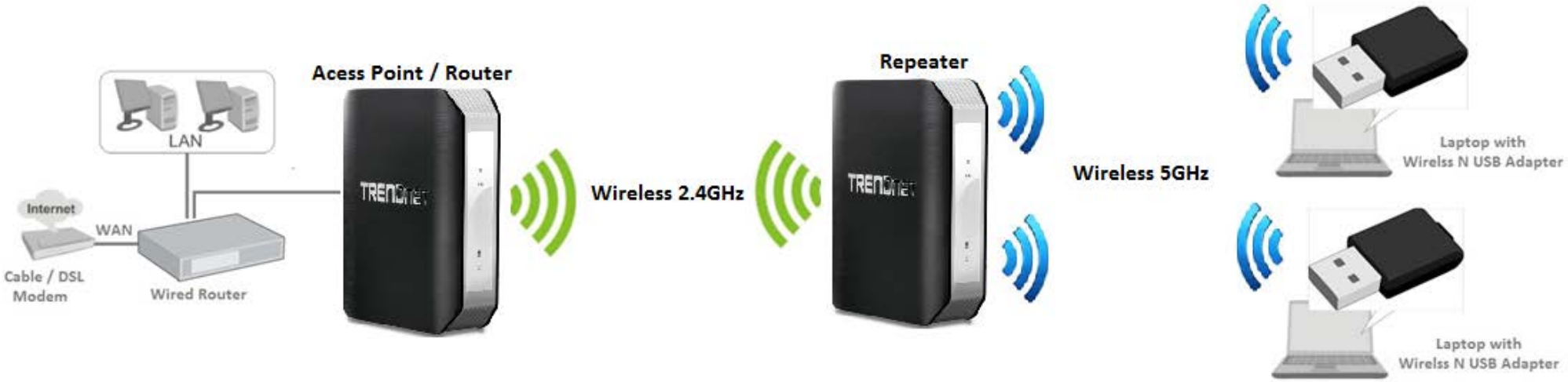
High Performance Single Band Mode



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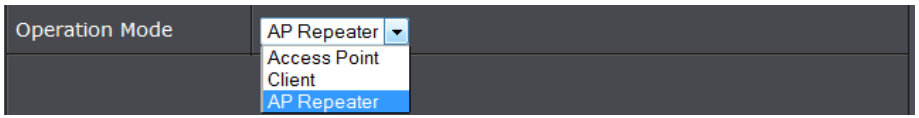
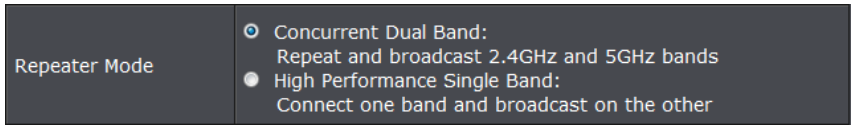
Set the device Repeater mode

Operation Mode

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click the **Operation Mode** and next to **Operation Mode** section drop-down list select **AP Repeater**.



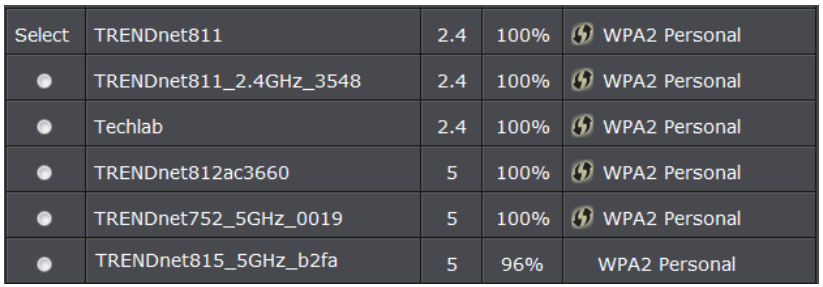
3. Select the Repeater Mode to use and click **Apply**.


Repeater Mode
Concurrent Dual Band:
Repeat and broadcast 2.4GHz and 5GHz bands
High Performance Single Band:
Connect one band and broadcast on the other

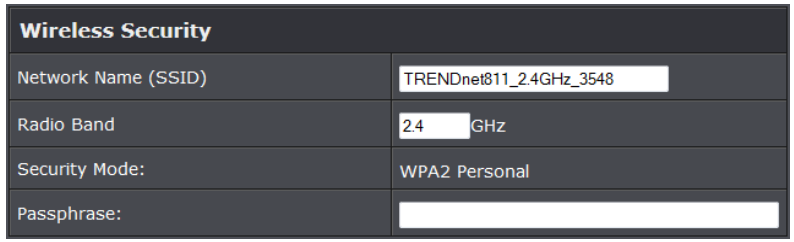
Concurrent Dual Band (AP Repeater) mode Site Survey

Wireless > Site Survey

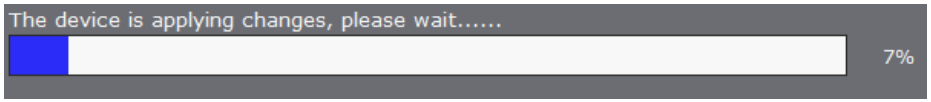
1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless** and click on **Site Survey.**
3. Search for your wireless network to extend or repeat in the wireless network list. In the **Select** column, click the radio button to select your wireless network.


Select
TRENDnet811 2.4 100% WPA2 Personal
TRENDnet811_2.4GHz_3548 2.4 100% WPA2 Personal
Techlab 2.4 100% WPA2 Personal
TRENDnet812ac3660 5 100% WPA2 Personal
TRENDnet752_5GHz_0019 5 100% WPA2 Personal
TRENDnet815_5GHz_b2fa 5 96% WPA2 Personal

4. At the bottom, click **Connect** to connect and copy the settings of the selected wireless network.
5. If your wireless network requires wireless security, you will be prompted to enter your wireless key. Enter your **Wireless Key** required to connect to your existing wireless network and click **Connect.**



6. Wait for the device to apply the settings.



7. To verify the access point has successfully copied the settings and repeated the signal of your wireless network, wait for the Link Status to display **Connected**. It may take up to 1 minute for your device to verify and display the connection status.

Note: *If the Link Status does not display a Connected status after 1 min, please re-attempt the procedure.*

Concurrent Dual Band (AP Repeater) mode Manual

Wireless > Manual Wireless Setting

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless** and click on **Manual Wireless Setting.**
3. Configure the wireless network and security settings of the repeated signal. Click **Apply** to save settings.

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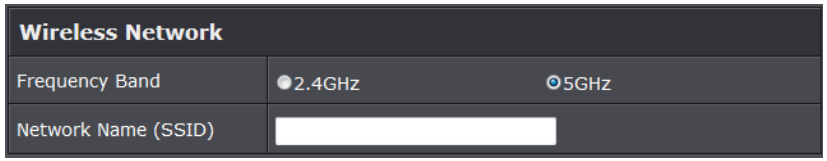
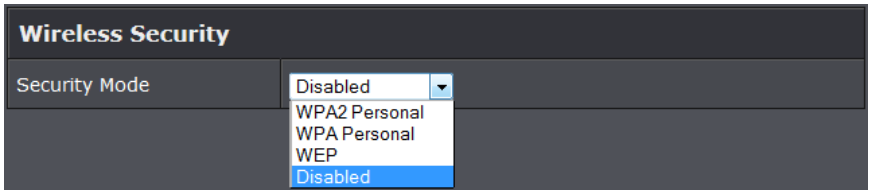
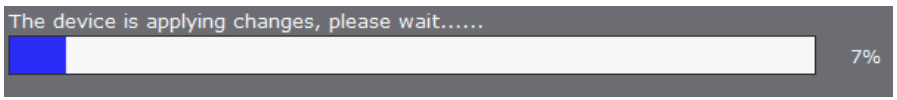


- **Frequency Band:** Select the operating wireless frequency you would like to repeat.
- **Network Name (SSID):** Enter the wireless network name of the signal you would like to repeat.



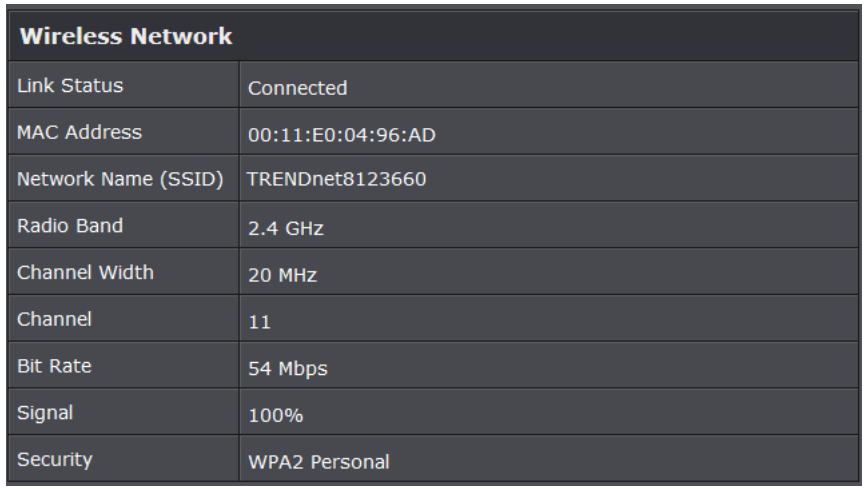
- **Security Mode:** Select and configure the wireless security settings of the wireless signal you would like to repeat.

4. Wait for the device to apply the settings.



5. To verify the access point has successfully copied the settings and repeated the signal of your wireless network, wait for the Link Status to display **Connected**. It may take up to 1 minute for your device to verify and display the connection status.

Note: *If the Link Status does not display a Connected status after 1 min, please re-attempt the procedure.*



- **Link Status:** Displays the connection status of the device either **Connected** or **Disconnected.**
- **MAC Address:** Displays the MAC address of the TEW-815DAP
- **Network Name (SSID):** Displays the wireless network name
- **Radio Band:** Displays the operating wireless radio band used
- **Channel Width:** Display the channel width of the repeated signal
- **Channel:** Displays the wireless channel used
- **Bit Rate:** Displays the estimated connection bit rate
- **Signal:** Displays the connection signal strength
- **Security:** Displays the wireless security used.

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High Performance Single Band (AP Repeater) mode

Wireless > Site Survey

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless** and click on **Site Survey.**
3. Search for your wireless network to extend or repeat in the wireless network list. In the **Select** column, click the radio button to select your wireless network.

Select				
	TRENDnet811	2.4	100%	WPA2 Personal
○	TRENDnet811_2.4GHz_3548	2.4	100%	WPA2 Personal
○	Techlab	2.4	100%	WPA2 Personal
○	TRENDnet812ac3660	5	100%	WPA2 Personal
○	TRENDnet752_5GHz_0019	5	100%	WPA2 Personal
○	TRENDnet815_5GHz_b2fa	5	96%	WPA2 Personal

4. At the bottom, click **Connect** to connect and copy the settings of the selected wireless network.
5. If your wireless network requires wireless security, you will be prompted to enter your wireless key. Enter your **Wireless Key** required to connect to your existing wireless network and click **Connect.**

Wireless Security	
Network Name (SSID)	TRENDnet811_2.4GHz_3548
Radio Band	2.4 GHz
Security Mode:	WPA2 Personal
Passphrase:	

6. Wait for the device to apply the settings.

The device is applying changes, please wait.....

7%

7. To verify the access point has successfully copied the settings and repeated the signal of your wireless network, wait for the Link Status to display **Connected**. It may take up to 1 minute for your device to verify and display the connection status.

   Note: *If the Link Status does not display a Connected status after 1 min, please re-attempt the procedure.*

Wireless Network	
Link Status	Connected
MAC Address	00:11:E0:04:96:AD
Network Name (SSID)	TRENDnet8123660
Radio Band	2.4 GHz
Channel Width	20 MHz
Channel	11
Bit Rate	54 Mbps
Signal	100%
Security	WPA2 Personal

- **Link Status:** Displays the connection status of the device either **Connected** or **Disconnected.**
- **MAC Address:** Displays the MAC address of the TEW-815DAP
- **Network Name (SSID):** Displays the wireless network name
- **Radio Band:** Displays the operating wireless radio band used
- **Channel Width:** Display the channel width of the repeated signal
- **Channel:** Displays the wireless channel used
- **Bit Rate:** Displays the estimated connection bit rate
- **Signal:** Displays the connection signal strength
- **Security:** Displays the wireless security used.

8. The TEW-815DAP will broadcast the extended network with a similar wireless network name (SSID) as the repeated signal but with "-EXT". For example, the TEW-815DAP is connected to your existing 2.4GHz wireless network name "Home". The TEW-815DAP will broadcast "Home – EXT" wireless network in 5GHz wireless band.

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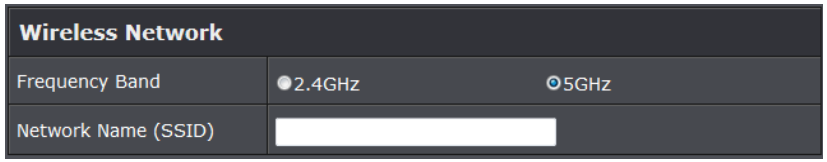
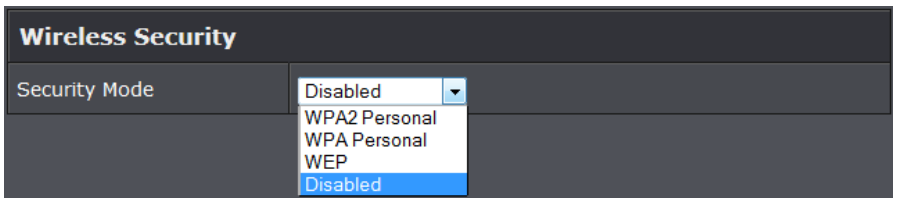
High Performance Signal Band (AP Repeater mode) Manual

Wireless > Manual Wireless Setting

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless** and click on **Manual Wireless Setting.**
3. Configure the wireless network and security settings of the repeated signal. Click **Apply** to save settings.

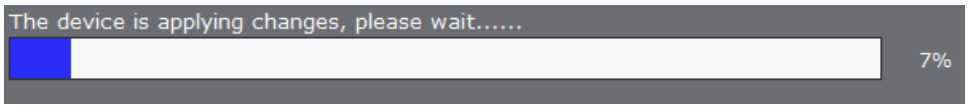


- **Frequency Band:** Select the operating wireless frequency you would like to repeat.
- **Network Name (SSID):** Enter the wireless network name of the signal you would like to repeat.



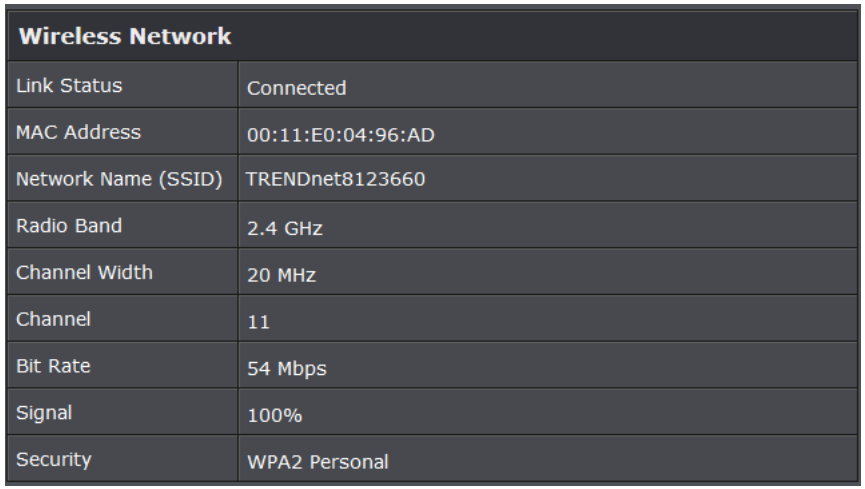
- **Security Mode:** Select and configure the wireless security settings of the wireless signal you would like to repeat.

4. Wait for the device to apply the settings.



5. To verify the access point has successfully copied the settings and repeated the signal of your wireless network, wait for the Link Status to display **Connected**. It may take up to 1 minute for your device to verify and display the connection status.

Note: *If the Link Status does not display a Connected status after 1 min, please re-attempt the procedure.*



- **Link Status:** Displays the connection status of the device either **Connected** or **Disconnected.**
- **MAC Address:** Displays the MAC address of the TEW-815DAP
- **Network Name (SSID):** Displays the wireless network name
- **Radio Band:** Displays the operating wireless radio band used
- **Channel Width:** Display the channel width of the repeated signal
- **Channel:** Displays the wireless channel used
- **Bit Rate:** Displays the estimated connection bit rate
- **Signal:** Displays the connection signal strength
- **Security:** Displays the wireless security used.

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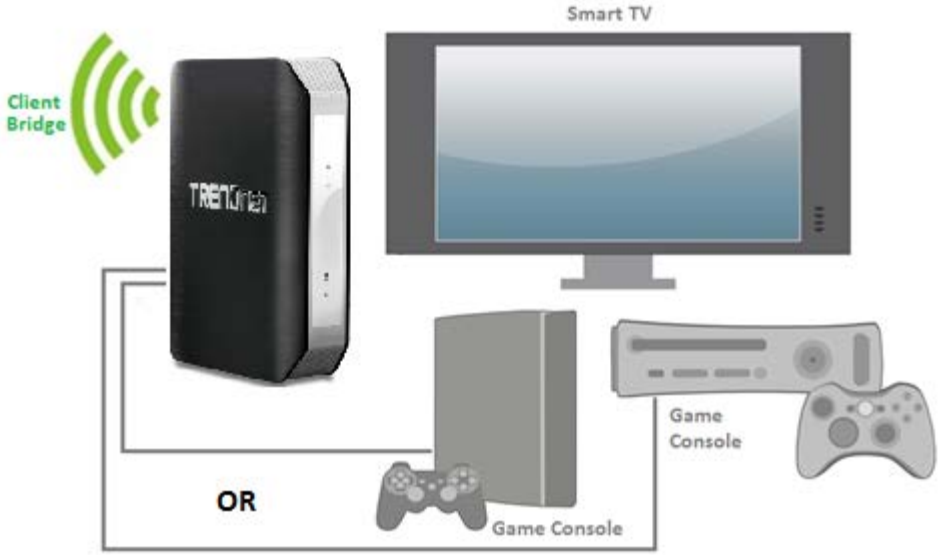
Client Bridge

Client Bridge mode allows the device to act as a wireless client device to connect to your wireless network and bridge the wireless connection from the wireless network to the LAN port located on the back of the device. Client devices with wired network capability such as in a media or entertainment center (ex. Smart TV, Game Console, DVR, etc.) can connect to one of the available LAN port using an Ethernet cable to establish wired connectivity to your network. When using this mode, please note that Client Bridge mode can only function using one band at a time, 2.4GHz or 5GHz and other modes cannot be used simultaneously.



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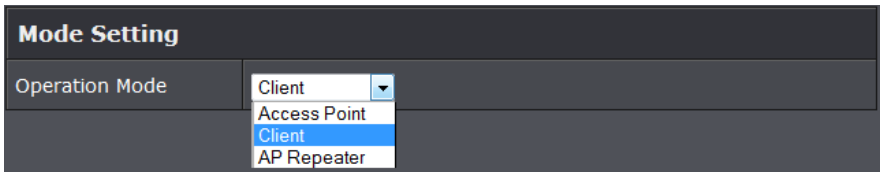
Set the device to client bridge mode

Operation Mode

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click the **Operation Mode** and next to **Operation Mode** section drop-down list select **Client**.



4. To save changes, click **Apply**.

Configure Client mode

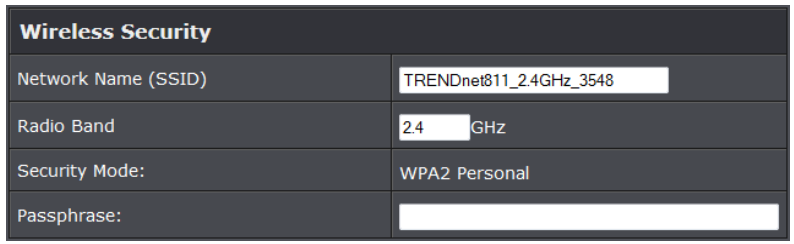
Wireless > Site Survey

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless** and click on **Site Survey.**
3. Search for your wireless network to extend or repeat in the wireless network list. In the **Select** column, click the radio button to select your wireless network.

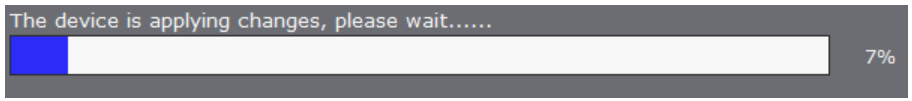
Select	TRENDnet811	2.4	100%	WPA2 Personal
○	TRENDnet811_2.4GHz_3548	2.4	100%	WPA2 Personal
○	Techlab	2.4	100%	WPA2 Personal
○	TRENDnet812ac3660	5	100%	WPA2 Personal
○	TRENDnet752_5GHz_0019	5	100%	WPA2 Personal
○	TRENDnet815_5GHz_b2fa	5	96%	WPA2 Personal

4. At the bottom, click **Connect** to connect and copy the settings of the selected wireless network.

5. If your wireless network requires wireless security, you will be prompted to enter your wireless key. Enter your **Wireless Key** required to connect to your existing wireless network and click **Connect.**



6. Wait for the device to apply the settings.



7. To verify the access point has successfully copied the settings and repeated the signal of your wireless network, wait for the Link Status to display **Connected**. It may take up to 1 minute for your device to verify and display the connection status.

Note: *If the Link Status does not display a Connected status after 1 min, please re-attempt the procedure.*

Wireless Network	
Link Status	Connected
MAC Address	00:11:E0:04:96:AD
Network Name (SSID)	TRENDnet8123660
Radio Band	2.4 GHz
Channel Width	20 MHz
Channel	11
Bit Rate	54 Mbps
Signal	100%
Security	WPA2 Personal

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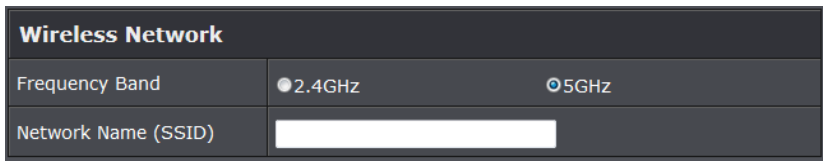
- **Link Status:** Displays the connection status of the device either **Connected** or **Disconnected.**
- **MAC Address:** Displays the MAC address of the TEW-815DAP
- **Network Name (SSID):** Displays the wireless network name
- **Radio Band:** Displays the operating wireless radio band used
- **Channel Width:** Display the channel width of the repeated signal
- **Channel:** Displays the wireless channel used
- **Bit Rate:** Displays the estimated connection bit rate
- **Signal:** Displays the connection signal strength
- **Security:** Displays the wireless security used.

8. The TEW-815DAP will broadcast the extended network with a similar wireless network name (SSID) as the repeated signal but with "**-EXT**". For example, the TEW-815DAP is connected to your existing 2.4GHz wireless network name "Home". The TEW-815DAP will broadcast "**Home – EXT**" wireless network in 5GHz wireless band.

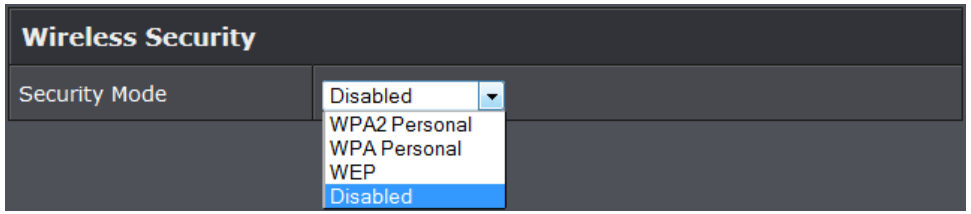
Manually configure Client mode

Wireless > Manual Wireless Setting

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless** and click on **Manual Wireless Setting.**
3. Configure the wireless network and security settings of the repeated signal. Click **Apply** to save settings.

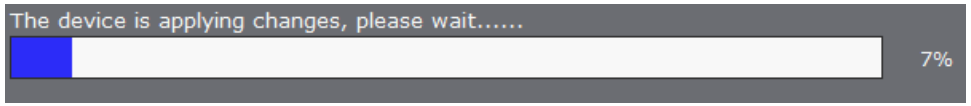


- **Frequency Band:** Select the operating wireless frequency you would like to repeat.
- **Network Name (SSID):** Enter the wireless network name of the signal you would like to repeat.



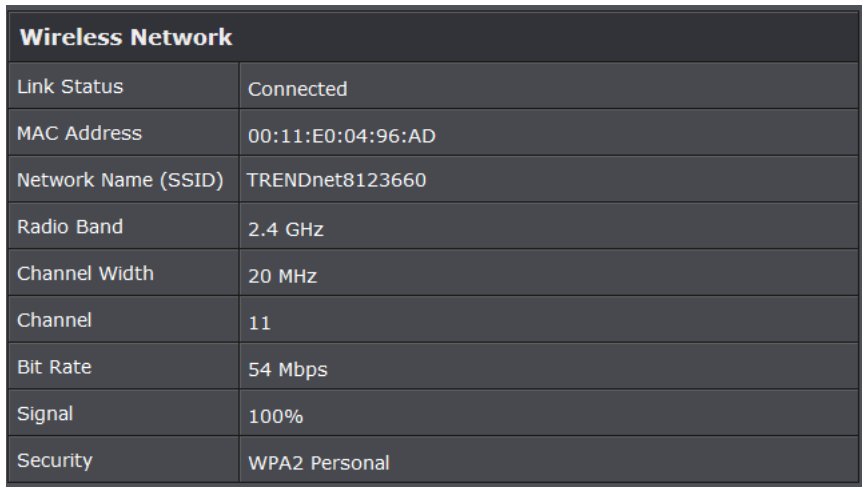
- **Security Mode:** Select and configure the wireless security settings of the wireless signal you would like to repeat.

4. Wait for the device to apply the settings.



5. To verify the access point has successfully copied the settings and repeated the signal of your wireless network, wait for the Link Status to display **Connected**. It may take up to 1 minute for your device to verify and display the connection status.

Note: *If the Link Status does not display a Connected status after 1 min, please re-attempt the procedure.*



- **Link Status:** Displays the connection status of the device either **Connected** or **Disconnected.**

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- **MAC Address:** Displays the MAC address of the TEW-815DAP
- **Network Name (SSID):** Displays the wireless network name
- **Radio Band:** Displays the operating wireless radio band used
- **Channel Width:** Display the channel width of the repeated signal
- **Channel:** Displays the wireless channel used
- **Bit Rate:** Displays the estimated connection bit rate
- **Signal:** Displays the connection signal strength
- **Security:** Displays the wireless security used.

Advanced Access Point Setup

MAC Address Filters

Wireless > Security

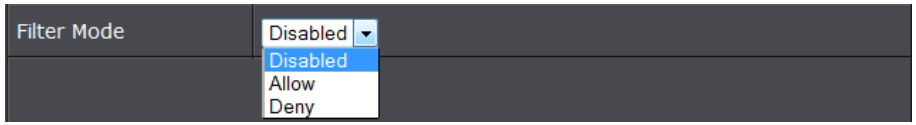
Every network device has a unique, 12-digit MAC (Media Access Control) address. Using MAC filters, you can allow or deny specific computers and other devices from using this access point's wireless network. You can enter up to 24 MAC address entries.

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Access**, click on **MAC Filters.**
3. Review the MAC Filter options, click **Save Settings** to save settings.

Click the **Configuring MAC Filtering below** drop-down list to choose the MAC filter function.

- **Turn MAC Filtering OFF:** disables the MAC address filter.
- **Turn MAC Filtering ON and ALLOW computers listed to access the network** Only **Allow** computers/devices with MAC addresses listed to access the access point management page and the Internet. Deny all others. **Turn MAC Filtering ON and DENY computers listed to access the network**

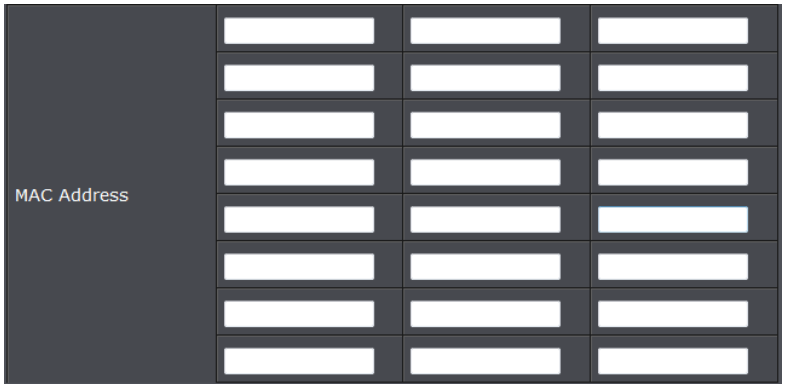
Only **Deny** computers/devices with MAC addresses listed to access to the access point management page and the Internet. Allow all others.



Note: *MAC filter can be configured to allow access to the listed MAC address and deny all others unlisted or vice versa. The recommended function is to choose to only allow access to the MAC addresses listed and deny all others unlisted because it is easier to determine the MAC addresses of devices in your network then to determine which MAC addresses you do not want to allow access.*

Before saving settings, add the MAC addresses to the MAC Table and configure the options first.

- **MAC Address:** Enter the MAC address of the devices you would like to filter. *(e.g. 00:11:22:AA:BB:CC)*



Note: *If you device is not listed, please refer to your computer or device documentation to find the MAC address.*

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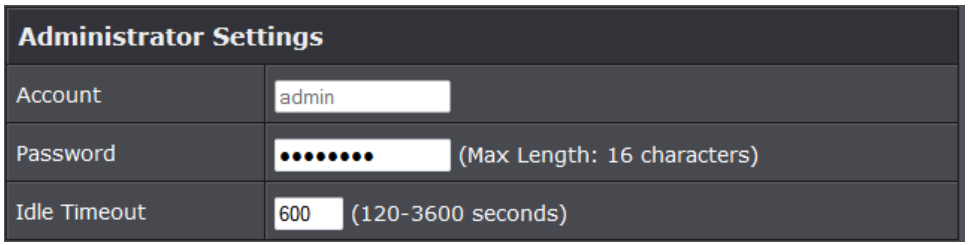
Change your access point login password

Administrator > Management

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Administrator**, and click on **Management**.
3. Under the **Administrator Settings** section, in the **Password** field, enter the new password. To save changes, click **Apply**.



Note: *If you change the access point login password, you will need to access the access point management page using the User Name "admin" and the new password.*

Change your device name

Administrator > Management

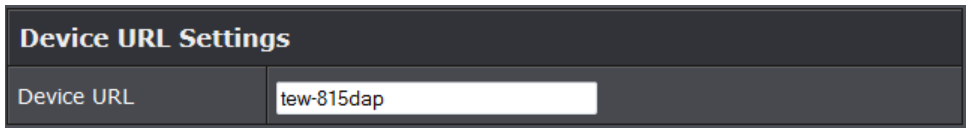
1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Administrator**, and click on **Management**.
3. Under the **Device Name** section, in the **Device Name** field, enter the new device name to display on your network to identify the access point.

3. To save changes, click **Apply**.

Change your device URL

Administrator > Management

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Administrator**, and click on **Management**.
3. Under the **Device URL Settings** section, in the **Device URL** field, enter the new device name to display on your network to identify the access point. To save changes, click **Apply**.



Note: *You will need to access your access point management page using your new access point IP address. (e.g. Instead of using the default login URL http://tew-815DAP*

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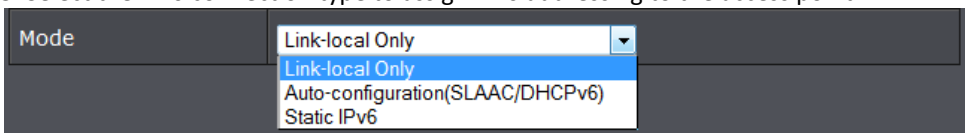
IPv6 Connection Settings

Network > IPv6

IPv6 (Internet Protocol Version 6) is a new protocol that significantly increases the number of available Internet public IP addresses due to the 128-bit IP address structure versus IPv4 32-bit address structure. In addition, there are several integrated enhancements compared to the most commonly used and well known IPv4 (Internet Protocol Version 4) such as:

- Integrated IPsec – Better Security
- Integrated Quality of Service (QoS) – Lower latency for real-time applications
- Higher Efficiency of Routing – Less transmission overhead and smaller routing tables
- Easier configuration of addressing

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Network**, and click on **IPv6 Setting**.
3. Select the IPv6 connection type to assign IPv6 addressing to the access point.



- Link-Local Only
- Auto-configuration (SLAAC/DHCPv6)
- Static IPv6

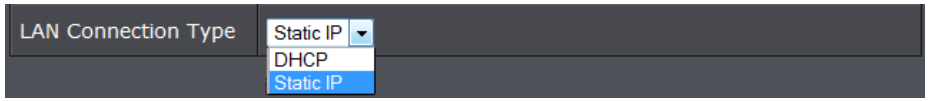
Change your access point IP address

Network > LAN Settings

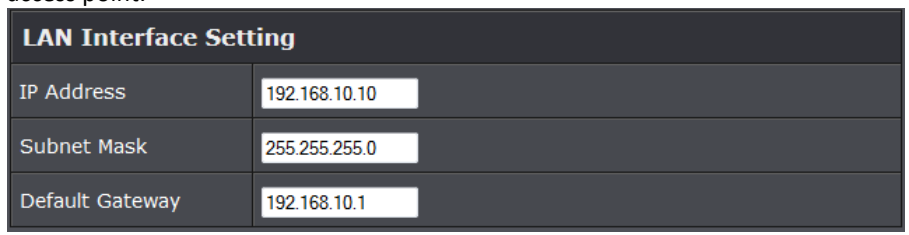
Typically, the access point IP address settings only needs to be changed when connecting the access point to your network and configuring to the device to be in the same IP network as your existing network.

Default Access Point IP Address Settings: 192.168.10.100 / 255.255.255.0

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Main**, and click on **Network Settings**.
3. Under **Connection Type**, click the drop-down list to select the access point IP address settings.



- **Dynamic IP (DHCP):** Choose the option to set the access point to automatically obtain IP address settings from a DHCP server
  Note: *Typically, your network router has a built-in DHCP server.*
- **Static IP:** Choose this option to manually configure the IP address settings of the access point.



- **IP Address:** Enter the new access point IP address. (e.g. *192.168.0.100*)
- **Subnet Mask:** Enter the new access point subnet mask. (e.g. *255.255.255.0*)
- **Gateway Address:** Enter the default gateway address of your network. This parameter is required for the access point to access Internet for functions such as e-mail notifications.
  Note: *Typically, your network router IP address is used as the default gateway address to access the Internet e.g. 192.168.10.1)*

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4. To save changes, click **Apply**.

Note: *You will need to access your access point management page using your new access point IP address. (e.g. Instead of using the default http://192.168.10.100 your new access point IP address will use the following format using your new IP address http://(new.ipaddress.here) to access your access point management page. You can also use the default login URL http://tew-815DAP*

Access Point Maintenance & Monitoring

Reset your Access Point to factory defaults

Administrator > Settings Management

You may want to reset your access point to factory defaults if you are encountering difficulties with your access point and have attempted all other troubleshooting. Before you reset your access point to defaults, if possible, you should backup your access point configuration first, see "Backup and restore your access point configuration settings" on page 47.

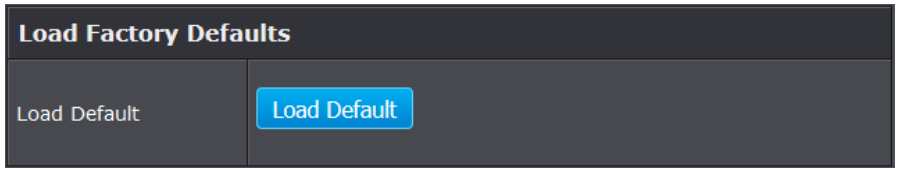
There are two methods that can be used to reset your access point to factory defaults.

- **Reset Button** – Located on the rear panel of your access point, see "Product Hardware Features" on page 2. Use this method if you are encountering difficulties with accessing your access point management page.

  OR

- **Access Point Management Page**

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Administrator** and click on **Settings Management**.
3. Next to **Load Factory Defaults**, click **Load Default**. When prompted to confirm this action, click **OK**.



Access Point Default Settings

Administrator User Name	admin
Administrator Password	admin
Access Point Default URL	*http://tew-815DAP*
Access Point IP Address	192.168.10.100
Access Point Subnet Mask	255.255.255.0
Mode	Access Point
Wireless 2.4GHz & 5GHz	Enabled
Wireless 2.4GHz Network Name/Encryption	Please refer to sticker or device label
Wireless 2.4GHz & 5GHz Multiple SSID	Disabled

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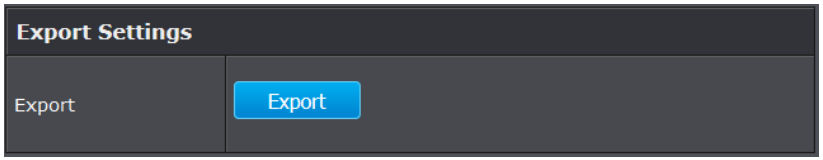
Backup and restore your access point configuration settings

Administrator > Settings Management

You may have added many customized settings to your access point and in the case that you need to reset your access point to default, all your customized settings would be lost and would require you to manually reconfigure all of your access point settings instead of simply restoring from a backed up access point configuration file.

To backup your access point configuration:

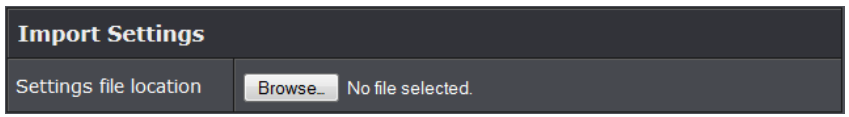
1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Administrator** and click on **Settings Management**.
3. Next to **Export Settings** section, click **Export**.



4. Depending on your web browser settings, you may be prompted to save a file (specify the location) or the file may be downloaded automatically to the web browser settings default download folder. (Default Filename: *config.bin)*

To restore your access point configuration:

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Administrator** and click on **Settings Management**.
3. Next to **Load Settings From Local Hard Drive,** depending on your web browser, click on **Browse** or **Choose File**.



4. A separate file navigation window should open.
5. Select the access point configuration file to restore and click **Import**. (Default Filename: *config.bin*). If prompted, click **Yes** or **OK**.
6. Wait for the access point to restore settings.

Reboot your access point

Administrator > Settings Management

You may want to restart your access point if you are encountering difficulties with your access point and have attempted all other troubleshooting.

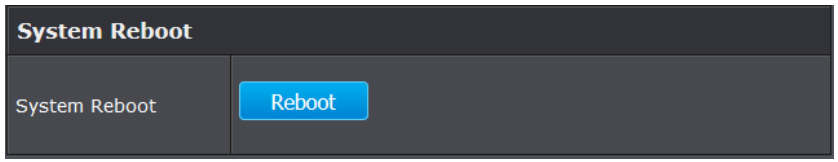
There are two methods that can be used to restart your access point.

- **Turn the access point** off for 10 seconds using the access point On/Off switch located on the rear panel of your access point or disconnecting the power port, see "Product Hardware Features" on page 2. Use this method if you are encountering difficulties with accessing your access point management page. This is also known as a hard reboot or power cycle.

OR

- **Access Point Management Page** – This is also known as a soft reboot or restart.

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Administrator** and click on **Settings Management**.
3. Next to **System Reboot**, click **Reboot**.



4. Wait for the device to reboot.

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Upgrade your access point firmware

Administrator > Upload Firmware

TRENDnet may periodically release firmware upgrades that may add features or fix problems associated with your TRENDnet access point model and version. To check if there is a firmware upgrade available for your device, please check your TRENDnet model and version using the link. http://www.trendnet.com/downloads/

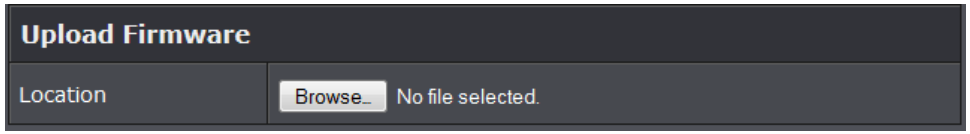
In addition, it is also important to verify if the latest firmware version is newer than the one your access point is currently running. To identify the firmware that is currently loaded on your access point, log in to the access point, click on the Administrator section and then on the Status. The firmware used by the access point is listed at the top of this page. If there is a newer version available, also review the release notes to check if there were any new features you may want or if any problems were fixed that you may have been experiencing.

1. If a firmware upgrade is available, download the firmware to your computer.
2. Unzip the file to a folder on your computer.

Please note the following:

- Do not interrupt the firmware upgrade process. Do not turn off the device or press the Reset button during the upgrade.
- If you are upgrade the firmware using a laptop computer, ensure that the laptop is connected to a power source or ensure that the battery is fully charged.
- Disable sleep mode on your computer as this may interrupt the firmware upgrade process.
- Do not upgrade the firmware using a wireless connection, only using a wired network connection.
- Any interruptions during the firmware upgrade process may permanently damage your access point.

3. Log into your access point management page (see "Access your access point management page" on page 7).
4. Click on **Administrator** and click on **Upload Firmware**.
5. Depending on your web browser, in the **Upload Firmware** section, click **Browse** or **Choose File**.



6. Navigate to the folder on your computer where the unzipped firmware file (*.bin*) is located and select it.
7. Click **Apply**. If prompted, click **Yes** or **OK**.

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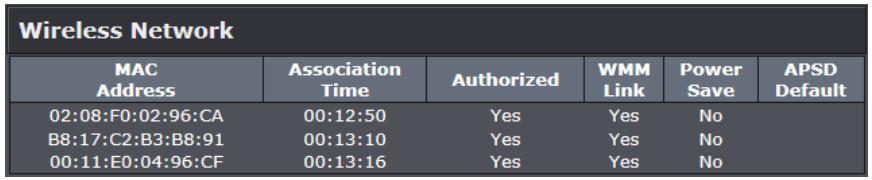
Wireless Client List

Wireless > Station List

You can view the list of active wireless devices currently connected to your access point.

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Wireless**, and click on **Station List.**



Wireless Network

MAC Address	Association Time	Authorized	WMM Link	Power Save	APSD Default
02:08:F0:02:96:CA	00:12:50	Yes	Yes	No	
B8:17:C2:B3:B8:91	00:13:10	Yes	Yes	No	
00:11:E0:04:96:CF	00:13:16	Yes	Yes	No	

- **MAC Address:** Displays the current MAC address of your wireless client.
- **Association Time: Displays the duration time of your wireless client**
- **IP Address:** Displays the current IP address of your wireless client.
- **Mode:** Displays the current mode your wireless client is connected (11a/b/g/n)
- **Rate:** Displays the current rate your wireless client has established.
- **Signal:** Displays the signal strength of your wireless client.

Check the access point system information

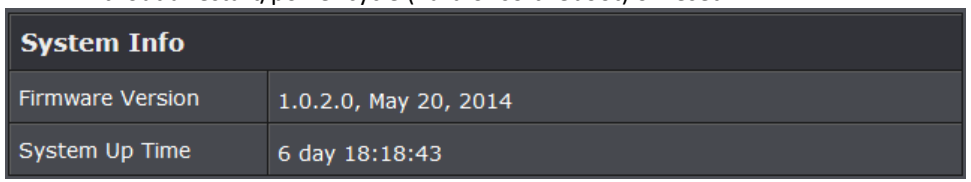
Administrator > Status

You may want to check the system information of your access point such as IP address settings, access point mode, wireless and wired network settings, access point wireless MAC addresses, and firmware version.

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Administrator** and click on **Status**.

System Info

- **Firmware Version:** The current firmware version your access point is running.
- **System Up Time:** The duration your access point has been running continuously without a restart/power cycle (hard or soft reboot) or reset.



System Info

Firmware Version	1.0.2.0, May 20, 2014
System Up Time	6 day 18:18:43

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LAN Information

LAN	
MAC Address	00:11:E0:04:96:AC
IP Address	192.168.10.10
Subnet Mask	255.255.255.0
Default Gateway	192.168.10.1

- **MAC Address:** Displays the current Ethernet wired interface MAC address.
- **IP Address:** The current IP address settings assigned to your access point.
- **Subnet Mask:** The current subnet mask assigned to your access point.
- **Default Gateway:** The current gateway assigned to your access point.

2.4GHz Wireless

2.4GHz Wireless	
MAC Address	00:11:E0:04:96:AD
Channel	11
Network Name (SSID1) / Security Mode	TRENDnet815_2.4GHz/WPA2-PSK
Multiple SSID2 / Security Mode	
Multiple SSID3 / Security Mode	
Multiple SSID4 / Security Mode	

- **MAC Address:** The MAC address of your access point's 2.4GHz wireless LAN or interface configuration.
- **Channel** – Displays the current 2.4GHz wireless channel your access point is operating.
- **Network Name (SSID)/ Security Mode:** Displays the current 2.4GHz wireless network name assigned to your access point / Displays the wireless security type applied to 2.4GHz primary SSID.

5GHz Wireless

5GHz Wireless	
MAC Address	00:11:E0:04:96:B1
Channel	48
Network Name (SSID1) / Security Mode	mediatest_5GHz_815/WPA2-PSK
Multiple SSID2 / Security Mode	
Multiple SSID3 / Security Mode	
Multiple SSID4 / Security Mode	

- **MAC Address:** The MAC address of your access point's 5GHz wireless LAN or interface configuration.
- **Channel:** Displays the current 5GHz wireless channel your access point is operating.
- **Network Name (SSID)/ Security Mode:** Displays the current 5GHz wireless network name assigned to your access point / Displays the wireless security type applied to 2.4GHz primary SSID.

IPv6 Status

Administrator > IPv6 Status

You can view the current IPv6 status on your access point.

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Administrator**, and click on **IPv6 Status**

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Internal Network Configuration	
Connected Type	Link-local Only
LAN IPv6 Address	
IPv6 Default Gateway	
LAN IPv6 Link-Local Address	fe80::211:e0ff:fe04:96ac
Primary IPv6 DNS Server	
Secondary IPv6 DNS Server	

- **Connected Type:** Displays the IPv6 connection type assigned to your access point.
- **LAN IPv6 Address:** Displays the IPv6 IP address assigned to your access point.
- **IPv6 Default Gateway:** Displays the IPv6 default gateway assigned to your access point.
- **LAN IPv6 Link-Local Address:** Displays the link-local address of the access point.
- **Primary/Secondary IPv6 DNS Server:** Displays the IPv6 DNS server addresses assigned to your access point.

View your access point log

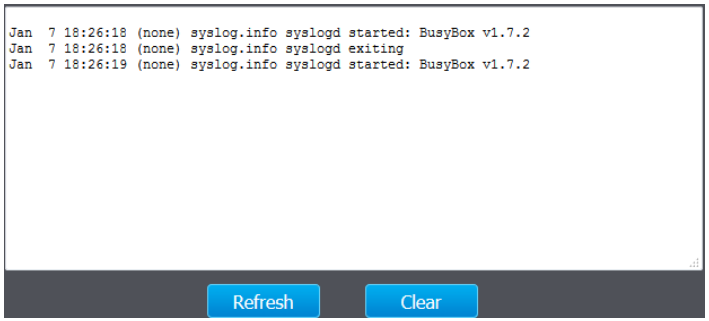
Administrator > System Log

Your access point log can be used to obtain activity information on the functionality of your access point or for troubleshooting purposes.

1. Log into your access point management page (see "Access your access point management page" on page 7).
2. Click on **Administrator**, and click on **System Log**.
3. Under System **Log** section, check the bog next to **Enable System Log** to turn on system log.

System Log	
Enable System Log	☑

4. Click **Apply** to save settings.


Jan 7 18:26:18 (none) syslog.info syslogd started: BusyBox v1.7.2
Jan 7 18:26:18 (none) syslog.info syslogd exiting
Jan 7 18:26:19 (none) syslog.info syslogd started: BusyBox v1.7.2
Refresh
Clear

- **Refresh:** Click to refresh the log.
- **Clear:** Click to clear all log entries.

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Access Point Mode Management Page Structure

Wizard

Operation Mode

- Device Mode
  - Access Point
  - Client
  - AP Repeater

Network

- LAN
  - DHCP
  - Static IP
- IPv6

Wireless 2.4GHz

- Basic
  - Mode
  - Multiple SSID
  - WDS
- Advanced
- Security
  - MAC Filter
- WPS (Wi-Fi Protected Setup)
- Station List

Wireless 5GHz

- Basic
  - Mode
  - Multiple SSID
  - WDS
- Advanced
- Security
  - MAC Filter
- WPS (Wi-Fi Protected Setup)
- Station List

Administrator

- Management
  - Password
- Upload Firmware
- Settings Management
  - Export settings
  - Restore settings
  - Load factory default
  - Reboot
- System Log
- Status
- IPv6 Status

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AP Repeater/Client Bridge Mode Management Page Structure

Wizard

Operation Mode

- Device Mode
  - Access Point
  - Client
  - AP Repeater

Network

- LAN
  - DHCP
  - Static IP
- IPv6

Wireless

- Manual Wireless Setting
- Site Survey

Administrator

- Management
  - Password
- Upload Firmware
- Settings Management
  - Export settings
  - Restore settings
  - Load factory default
  - Reboot
- System Log
- Status
- IPv6 Status

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Technical Specifications

Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11n (up to 450 Mbps)
- IEEE 802.11ac (draft 2.0, up to 1.3 Gbps)

Hardware Interface

- 1 x Gigabit port
- Power switch
- WPS button
- LED indicators

Operation Modes

- Access Point (AP), AP + WDS
- Wireless Distribution System (WDS)
- Repeater
- Client

Special Features

- Concurrent dual band access point
- 1-to-2 repeater feature: repeats a single wireless band (Ex: 2.4 GHz) to both wireless bands (Ex: 2.4 and 5 GHz)
- IPv6 support (Static IPv6 and Auto-Configuration (SLAAC/DHCPv6))
- Multi-Language interface: English, French, Spanish, German, Russian

SSID

- Up to 4 SSIDs per band (AP mode)

Access Control

- Wireless encryption: WEP, WPA/WPA2-PSK, WPA/WPA2-RADIUS (AP mode)
- Access Controls: MAC Filter

Frequency

- 2.4GHz: FCC 2.412 - 2.462 GHz, ETSI: 2.412 – 2.472 GHz
- 5GHz: FCC 5.180 – 5.240 + 5.745 – 5.825, ETSI: 5.180 – 5.240 GHz

Modulation

- 802.11b: CCK, DQPSK, DBPSK
- 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM sub carrier with OFDM
- 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256QAM with OFDM

Wireless Channel

- 2.4 GHz: FCC: 1-11, ETSI: 1 - 13
- 5 GHz: FCC: 36, 40, 44, 48, 149, 159, 157, 161 and 165, ETSI: 36, 40, 44, 48

Antenna Gain

- 2.4 GHz: 6 dBi (max.) internal PIFA, 5 GHz: 6 dBi (max.) internal PIFA

Wireless Output Power/Receiving Sensitivity

- 802.11a: FCC: 22 dBm, CE: 18 dBm (max.)/-68 dBm (typical) @ 54 Mbps
- 802.11b: 19 dBm (max.)/-84 dBm (typical) @ 11 Mbps
- 802.11g: 18 dBm (max.)/-72 dBm (typical) @ 54 Mbps
- 802.11n: FCC: 18 dBm (max.)/-68 dBm (typical) @ 450 Mbps 2.4 GHz
- 802.11n: FCC: 22 dBm, CE: 18 dBm (max.)/-68 dBm (typical) @ 450 Mbps 5 GHz
- 802.11ac: FCC: 23 dBm, CE: 19 dBm (max.)/-55 dBm (typical) @ 1.3 Gbps

Power

- Input: 100 – 240 V, 50 – 60 Hz, 0.8 A
- Output: 12 V DC, 2 A
- Consumption: 20 Watts (max.)

Operating Temperature

- 0 – 40 °C (32 – 104 °F)

Operating Humidity

- Max. 85% non-condensing

Certifications

- CE
- FCC

Dimensions

- 48 x 155 x 180 mm (1.9 x 6.1 x 7.1 in.)

Weight

- 340 g (12 oz.)

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Troubleshooting

Q: I typed http://tew-815DAP in my Internet Browser Address Bar, but an error message says "The page cannot be displayed." How can I access the access point management page?
Answer:
Assign your computer a static IP address in the subnet of 192.168.10.x (ex. 192.168.10.25) and access the access point using the default IP address 192.168.10.100. http://192.168.10.100

Q: I typed http://192.168.10.100 in my Internet Browser Address Bar, but an error message says "The page cannot be displayed." How can I access the access point management page?
Answer:
1. Check your hardware settings again. See "Basic Installation" on page 5.
2. Make sure the LAN port you are connected to is on.
3. Make sure your network adapter TCP/IP settings are set to *Obtain an IP address automatically* or *DHCP* (see the steps below).
4. Make sure your computer is connected to one of the access point's LAN port
5. Press on the factory reset button for 15 seconds, the release.

Windows 7

a. Go into the **Control Panel**, click **Network and Sharing Center**.
b. Click **Change Adapter Settings**, right-click the **Local Area Connection** icon.
c. Then click **Properties** and click **Internet Protocol Version 4 (TCP/IPv4)**.
d. Then click **Obtain an IP address automatically** and click **OK**.

Windows Vista

a. Go into the **Control Panel**, click **Network and Internet**.
b. Click **Manage Network Connections,** right-click the **Local Area Connection** icon and click **Properties**.
c. Click **Internet Protocol Version (TCP/IPv4)** and then click **Properties**.
d. Then click **Obtain an IP address automatically** and click **OK**.

Windows XP/2000

a. Go into the **Control Panel**, double-click the **Network Connections** icon
b. Right-click the **Local Area Connection** icon and the click **Properties**.
c. Click **Internet Protocol (TCP/IP)** and click **Properties**.
d. Then click **Obtain an IP address automatically** and click **OK**.

Note: *If you are experiencing difficulties, please contact your computer or operating system manufacturer for assistance.*

Q: The Wizard does not appear when I access the access point. What should I do?
Answer:
1. Click on Main and Wizard on the left hand side.
2. Near the top of the browser, "Pop-up blocked" message may appear. Right click on the message and select Always Allow Pop-ups from This Site.
3. Disable your browser's pop up blocker.

Q: I cannot connect wirelessly to the access point. What should I do?
Answer:
1. Double check that the Wireless LED on the access point is on.
2. Power cycle the router. Unplug the power to the access point. Wait 15 seconds, then plug the power back in to the access point.
3. Contact the manufacturer of your wireless network adapter and make sure the wireless network adapter is configured with the proper SSID. The default predefined SSID is printed on the device label on the bottom or on the sticker on the side of the unit.
4. To verify whether or not wireless is enabled, login to the access point management page, click on *Basic and Wireless*.
5. Please see "Steps to improve wireless connectivity" on page 14 if you continue to have wireless connectivity problems.

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Appendix

How to find your IP address?

Note: *Please note that although the following procedures provided to follow for your operating system on configuring your network settings can be used as general guidelines, however, it is strongly recommended that you consult your computer or operating system manufacturer directly for assistance on the proper procedure for configuring network settings.*

Command Prompt Method

Windows 2000/XP/Vista/7/8

1. On your keyboard, press **Windows Logo+R** keys simultaneously to bring up the Run dialog box.

2. In the dialog box, type ***cmd*** to bring up the command prompt.

3. In the command prompt, type ***ipconfig /all*** to display your IP address settings.

MAC OS X

1. Navigate to your **Applications** folder and open **Utilities**.

2. Double-click on **Terminal** to launch the command prompt.

3. In the command prompt, type ***ipconfig getifaddr <en0 or en1>*** to display the wired or wireless IP address settings.

Note: en0 *is typically the wired Ethernet and* ***en1*** *is typically the wireless Airport interface.*

Graphical Method

MAC OS 10.6/10.5

1. From the Apple menu, select **System Preferences**.
2. In System Preferences, from the **View** menu, select **Network**.
3. In the Network preference window, click a network port (e.g., Ethernet, AirPort, modem). If you are connected, you'll see your IP address settings under "Status:"

MAC OS 10.4

1. From the Apple menu, select **Location**, and then **Network Preferences**.
2. In the Network Preference window, next to "Show:", select **Network Status**. You'll see your network status and your IP address settings displayed.

Note: *If you are experiencing difficulties, please contact your computer or operating system manufacturer for assistance.*

How to configure your network settings to obtain an IP address automatically or use DHCP?

Note: *Please note that although the following procedures provided to follow for your operating system on configuring your network settings can be used as general guidelines, however, it is strongly recommended that you consult your computer or operating system manufacturer directly for assistance on the proper procedure for configuring network settings.*

Windows 7/8

a. Go into the **Control Panel**, click **Network and Sharing Center**.

b. Click **Change Adapter Settings**, right-click the **Local Area Connection** icon.

c. Then click **Properties** and click **Internet Protocol Version 4 (TCP/IPv4)**.

d. Then click **Obtain an IP address automatically** and click **OK**.

Windows Vista

a. Go into the **Control Panel**, click **Network and Internet**.
b. Click **Manage Network Connections,** right-click the **Local Area Connection** icon and click **Properties**.
c. Click **Internet Protocol Version (TCP/IPv4)** and then click **Properties**.
d. Then click **Obtain an IP address automatically** and click **OK**.

Windows XP/2000

a. Go into the **Control Panel**, double-click the **Network Connections** icon
b. Right-click the **Local Area Connection** icon and the click **Properties**.
c. Click **Internet Protocol (TCP/IP)** and click **Properties**.

d. Then click **Obtain an IP address automatically** and click **OK**.

MAC OS 10.4/10.5/10.6

a. From the **Apple**, drop-down list, select **System Preferences**.
b. Click the **Network** icon.
c. From the **Location** drop-down list, select **Automatic**.
d. Select and view your Ethernet connection.

In MAC OS 10.4, from the **Show** drop-down list, select **Built-in Ethernet** and select the **TCP/IP** tab.

In MAC OS 10.5/10.6, in the left column, select **Ethernet**.

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e. Configure TCP/IP to use DHCP.

In MAC 10.4, from the **Configure IPv4**, drop-down list, select **Using DHCP** and click the **Apply Now** button.

In MAC 10.5, from the **Configure** drop-down list, select **Using DHCP** and click the **Apply** button.

In MAC 10.6, from the **Configure** drop-down list, select **Using DHCP** and click the **Apply** button.

f. Restart your computer.

Note: *If you are experiencing difficulties, please contact your computer or operating system manufacturer for assistance.*

How to configure your network settings to use a static IP address?

Note: *Please note that although the following procedures provided to follow for your operating system on configuring your network settings can be used as general guidelines, however, it is strongly recommended that you consult your computer or operating system manufacturer directly for assistance on the proper procedure for configuring network settings.*

Windows 7/8

a. Go into the **Control Panel**, click **Network and Sharing Center**.

b. Click **Change Adapter Settings**, right-click the **Local Area Connection** icon.

c. Then click **Properties** and click **Internet Protocol Version 4 (TCP/IPv4)**.

d. Then click **Use the following IP address,** and assign your network adapter a static IP address. Click **OK**

Windows Vista

a. Go into the **Control Panel**, click **Network and Internet**.

b. Click **Manage Network Connections,** right-click the **Local Area Connection** icon and click **Properties**.

c. Click **Internet Protocol Version (TCP/IPv4)** and then click **Properties**.

d. Then click **Use the following IP address,** and assign your network adapter a static IP address. Click **OK**

Windows XP/2000

a. Go into the **Control Panel**, double-click the **Network Connections** icon

b. Right-click the **Local Area Connection** icon and the click **Properties**.

c. Click **Internet Protocol (TCP/IP)** and click **Properties**.

d. Then click **Use the following IP address,** and assign your network adapter a static IP address. Click **OK**

MAC OS 10.4/10.5/10.6

a. From the **Apple**, drop-down list, select **System Preferences**.

b. Click the **Network** icon.

c. From the **Location** drop-down list, select **Automatic**.

d. Select and view your Ethernet connection.

How to find your MAC address?

In Windows 2000/XP/Vista/7/8,

Your computer MAC addresses are also displayed in this window, however, you can type ***getmac –v*** to display the MAC addresses only.

In MAC OS 10.4,

1. **Apple Menu > System Preferences > Network**
2. From the **Show** menu, select **Built-in Ethernet**.
3. On the **Ethernet** tab, the **Ethernet ID** is your MAC Address.

In MAC OS 10.5/10.6,

1. **Apple Menu > System Preferences > Network**
2. Select **Ethernet** from the list on the left.
3. Click the **Advanced** button.
3. On the **Ethernet** tab, the **Ethernet ID** is your MAC Address.

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How to connect to a wireless network using the built-in Windows utility?

Note: *Please note that although the following procedures provided to follow for your operating system on configuring your network settings can be used as general guidelines, however, it is strongly recommended that you consult your computer or operating system manufacturer directly for assistance on the proper procedure for connecting to a wireless network using the built-in utility.*

Windows 7/8

1. Open Connect to a Network by clicking the network icon (or) in the notification area.

2. In the list of available wireless networks, click the wireless network you would like to connect to, then click **Connect.**

4. You may be prompted to enter a security key in order to connect to the network.

5. Enter in the security key corresponding to the wireless network, and click **OK**.

Windows Vista

1. Open Connect to a Network by clicking the **Start Button**. and then click **Connect To.**

2. In the **Show** list, click **Wireless**.

3. In the list of available wireless networks, click the wireless network you would like to connect to, then click **Connect.**

4. You may be prompted to enter a security key in order to connect to the network.

5. Enter in the security key corresponding to the wireless network, and click **OK**.

Windows XP

1. Right-click the network icon in the notification area, then click **View Available Wireless Networks**.

2. In **Connect to a Network**, under **Available Networks**, click the wireless network you would like to connect to.

3. You may be prompted to enter a security key in order to connect to the network.

4. Enter in the security key corresponding to the wireless network, and click **Connect**.

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Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 24cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

RoHS

This product is RoHS compliant.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC, 2006/95/EC and 2009/125/EC
Regulation(EC) No.1275/2008
Regulation(EC) No.278/2009
EN60950-1:2006+A11: 2009+A:2010+A12:2011
Safety of Information Technology Equipment
EN 62311:2008
Product standard to demonstrate the compliance of radio base stations and fixed terminal stations for wireless telecommunication systems with the basic restrictions or the reference levels related to human exposure to radio frequency electromagnetic fields (110MHz - 40 GHz) - General public
EN 300 328 V1.7.1: (2006-10)
Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
EN 301 489-1 V1.9.2: (2011-09)
Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
EN 301 489-17 V2.2.1:(2012-09)
Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment; Part 17: Specific conditions for 2,4 GHz wideband transmission systems, 5 GHz high performance RLAN equipment and 5,8 GHz Broadband Data Transmitting Systems
EN 301 893 V1.7.1(2012-06)
Broadband Radio Access Networks (BRAN);5 GHz high performance RLAN;Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
This device is a 2.4/5G GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.
In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.
This device may not be used for setting up outdoor radio links in France and in some areas the RF

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output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

Česky [Czech]	TRENDnet tímto prohlašuje, že tento TEW-815DAP je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES, 2006/95/ES, a 2009/125/ES.
Dansk [Danish]	Undertegnede TRENDnet erklærer herved, at følgende udstyr TEW-TEW-815DAP overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF, 2006/95/EF, og 2009/125/EF.
Deutsch [German]	Hiermit erklärt TRENDnet, dass sich das Gerät TEW-815DAP in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG, 2006/95/EG und 2009/125/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab TRENDnet seadme TEW-815DAP vastavust direktiivi 1999/5/EÜ, 2006/95/EÜ ja 2009/125/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, TRENDnet, declares that this TEW-815DAP is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC, 2006/95/EC, and 2009/125/EC.
Español [Spanish]	Por medio de la presente TRENDnet declara que el TEW-815DAP cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE, 2006/95/CE, 2009/125/CE y.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑTRENDnet ΔΗΛΩΝΕΙ ΟΤΙ TEW-815DAP ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ, 2006/95/ΕΚ, 2009/125/ΕΚ και.
Français [French]	Par la présente TRENDnet déclare que l'appareil TEW-815DAP est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE, 2006/95/CE, 2009/125/CE et.
Italiano[Italian]	Con la presente TRENDnet dichiara che questo TEW-815DAP è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE, 2006/95/CE e 2009/125/CE.
Latviski [Latvian]	AršoTRENDnetdeklarē, ka TEW-815DAP atbilstDirektīvas 1999/5/EK, 2006/95/EK, un 2009/125/EK būtiskajāmprasībām un citiemar to saistītajiemnoteikumiem.
Lietuvių [Lithuanian]	Šiuo TRENDnet deklaruoja, kad šis TEW-815DAP atitinka esminius reikalavimus ir kitas 1999/5/EB, 2006/95/EB ir 2009/125/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart TRENDnet dat het toestel TEW-815DAP in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG, 2006/95/EG, en 2009/125/EG.
Malti [Maltese]	Hawnhekk, TRENDnet, jiddikjara li dan TEW-815DAP jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/KE, 2006/95/KE, u 2009/125/KE.
Magyar [Hungarian]	Alulírott, TRENDnet nyilatkozom, hogy a TEW-815DAP megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EK irányelv, a 2006/95/EK és a 2009/125/EK irányelv egyéb elõírásainak.
Polski [Polish]	Niniejszym TRENDnet oświadcza, że TEW-815DAP jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/WE, 2006/95/WE i 2009/125/WE.
Português [Portuguese]	TRENDnet declara que este TEW-815DAP está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE, 2006/95/CE e 2009/125/CE.
Slovensko [Slovenian]	TRENDnet izjavlja, da je ta TEW-815DAP v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES, 2006/95/ES in 2009/125/ES.
Slovensky [Slovak]	TRENDnettýmtovyhlasuje, že TEW-815DAP spĺňazákladnépožiadavky a všetkypríslušnéustanoveniaSmernice 1999/5/ES, 2006/95/ES, a 2009/125/ES.
Suomi [Finnish]	TRENDnet vakuuttaa täten että TEW-815DAP tyyppinen laite on direktiivin 1999/5/EY, 2006/95/EY ja 2009/125/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar TRENDnet att denna TEW-815DAP står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG, 2006/95/EG och 2009/125/EG.

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TEW-815DAP – 3 Years Warranty

AC/DC Power Adapter, Cooling Fan, and Power Supply carry 1 year warranty.

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